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RESPONSE TO EPA'S 104(E) FIRST REQUEST FOR INFORMATION
ASH GROVE CEMENT COMPANY
PORTLAND HARBOR SUPERFUND SITE

Prepared by:

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October 2008

ORIGINAL

TABLE OF CONTENTS

LIST OF TABLES

Acronym	Definition
ACDP	Air Contaminant Discharge Permit
AEN	American Environmental Network, Inc.
BTEX/N	Benzene, Toluene, Ethylbenzene, Xylenes, and Naphthalene
CAB	Cement Asbestos Board
CCS	Cowlitz Clean Sweep
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CGAC	Columbia Gorge Aluminum Company
CMP	Corrugated Metal Pipe
CMW	Columbia Metal Works Inc.
CSO	Combined Sewer Overflow
DBL	Double (as in "Double Bagged")
DDT	Dichloro-Diphenyl-Trichloroethane
DSL	Department of State Lands
EBS	Environmental Business Solutions, Inc.
EDR	Environmental Data Resources
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Environmental Site Assessment
FWS	Fish and Wildlife Service
gpm	Gallons per Minute
HID	High Intensity Discharge
HPAH	High Polynuclear Aromatic Hydrocarbon
MFA	Maul, Foster & Alongi, Inc.
MRL	Method Reporting Limit
MSDS	Material Safety Data Sheets
MSHA	Mine Safety and Health Administration
NGS	Northwest Geological Services, Inc.
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
OAR	Oregon Administrative Rules
ODEQ	Oregon Department of Environmental Quality
ORS	Oregon Revised Statutes
OSM	Oregon Steel Mills
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PEL	Permissible Exposure Limits

Acronym	Definition
PEMCO	Petroleum Equipment Maintenance Co.
POTW	Publicly Owned Treatment Works
PPM	Parts Per Million
PSC	Phillip Services Corporation
PSD	Prevention of Significant Deterioration
PSEL	Plant Site Emission Limit
PUC	Public Utilities Commission
RCRA	Resource Conservation and Recovery Act
RFI	Request for Information
SEACOR	Science and Engineering Analysis Corporation
SPCC	Spill Prevention Control and Countermeasure
SWPCP	Stormwater Pollution Control Plan
TPH	Total Petroleum Hydrocarbons
TSCA	Toxics Substance Control Act
TSD	Transfer, Storage or Disposal
TSI	Thermal System Insulation
UIC	Underground Injection Control
UPRR	Union Pacific Railroad
UST	Underground Storage Tank

1. General Objections to EPA's 104(e) Information Request

1. Ash Grove Cement Company (Ash Grove) objects to the questions posed in this request to the extent that information and documents sought do not relate and are not reasonably relevant to the site and that the questions are therefore not in accordance with law.
2. Ash Grove objects to the questions to the extent that their breadth causes the provision of the requested information and documents to be unduly burdensome.
3. Ash Grove objects to Definition No. 1 to the extent it seeks to define "you" or "Respondent" to include entities or persons other than Ash Grove and may seek to require Ash Grove to respond with regard to information, documents, or records that are not within Ash Grove's possession, custody, and control.
4. Ash Grove objects to Definition No. 4 to the extent it requires Ash Grove to provide information that raises privacy concerns regarding, for example but not limited to, social security numbers and health information. Per EPA's instructions, in response to those questions that require the identification of persons and other entities, Ash Grove has provided the names of individuals and companies identified by the review of records and by interviews with facility personnel. Ash Grove agrees to supply additional information about these contacts, to the extent that such information is available to Ash Grove, upon request.
5. Ash Grove objects to Instruction No. 5 to the extent it requires Ash Grove to identify all persons and documents relied upon in the preparation of responses to the Request for Information. The actual responses in this document were drafted by Ash Grove's technical consultants Maren Seibold and Liz Fedorowicz, with input from Ash Grove outside counsel Leslie Nellermoe, together with a number of Ash Grove personnel. Ash Grove staff, counsel and consultants reviewed thousands of documents in preparation for responding to the information request. It is too burdensome to maintain a record of every document and person consulted for the preparation of each response. Preparation of these responses is an iterative, interactive and dynamic process and Ash Grove did not keep a log of such contacts.
6. Ash Grove objects to the definition of "material" or "materials" in Definition No. 8 as vague, ambiguous, and overly broad.
7. Ash Grove objects to the phrases "otherwise has an affiliation with" and "otherwise had an affiliation" in Definition No. 10 as vague and ambiguous.
8. Ash Grove objects to the definition of "waste" or "wastes" in Definition No. 11 as vague, ambiguous, and overly broad.

2. General Assumptions Used in Preparation of Responses

The following general assumptions were used throughout the preparation of Ash Grove Cement Company's (Ash Grove's) response to EPA's Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104(e) information request:

1. Without waiving any objection to Definition 1, and after consideration of correspondence from Ms. Lori Houck-Cora on April 8, 2008, Ash Grove has answered the questions assuming that "Respondent," "you" and "your operations" refer to Ash Grove Cement and its operations and do not refer to any prior owners or operators of the properties Ash Grove owns within the Investigation Area. Ash Grove located various documents prepared by or on behalf of prior owners of the properties located at 3737 N. Port Center Way, Portland, OR 97217 (Terminal). To the extent that prior owners' documentation is responsive to the questions listed in EPA's information request, Ash Grove has provided copies of this documentation with these responses. However, Ash Grove specifically makes no representation with regard to the completeness or accuracy of those documents.
2. Individuals developing this response have used their best professional judgment in interpreting the intention of each question included in EPA's information request and preparing an appropriate response.
3. Some of the questions request only descriptions of facilities or actions. For those questions, Ash Grove has not identified nor provided documents upon which it relied to answer the questions, pursuant to guidance provided by Ms. Elizabeth McKenna by telephone to Leslie Nellermoe on April 15, 2008. It is too burdensome to maintain a record of every document and person consulted for the preparation of each response. Preparation of these responses is an iterative, interactive and dynamic process and Ash Grove did not keep a log of such contacts.
4. Unless otherwise stated in an individual response, Ash Grove has included information and documents up to and including May 16, 2008 in this response. When the phrase "to present" is used, it means up to May 16, 2008. Ash Grove acknowledges its obligation to supplement its responses and will do so as additional information is developed.
5. In the course of preparing this comprehensive response to EPA's inquiries in the 104(e) response, Ash Grove updated the information provided in its original extension request in May 2008. Please substitute this comprehensive response for the previously submitted partial response.
6. Both cement and lime are placarded materials for transportation purposes. In these responses, and unless otherwise described, neither small amounts of cement nor lime that may have fallen onto the ground or into the Willamette River during the normal course of business at Terminal or Rivergate has been included as spills or releases to the environment.

7. Ash Grove does not intend to, and specifically does not admit that any of the events described constitute leaks, spills or releases into the environment, or that the materials described were hazardous substances, pollutants or contaminants. Further, Ash Grove does not intend to and specifically does not waive any defenses it may have to any liability asserted against the company involving these events.

Many of the specific questions posed in the information request required Ash Grove to make additional assumptions based upon its best professional judgment. Those question-specific assumptions precede answers provided in Section 3.

3. RESPONSES TO EPA'S 104(E) REQUEST FOR INFORMATION

The following sections of this document provide responses to the questions included in EPA's January 18, 2008 information request. The specific language of each of EPA's question numbers is included in **bold** font for reference, and is followed by Ash Grove's corresponding response.

1. Provide the full legal, registered name and mailing address of Respondent.

Ash Grove Cement Company
P.O. Box 25900
Overland Park, KS 66225

Ash Grove Cement Company is a Delaware corporation.

2. For each person answering these questions on behalf of Respondent, provide:

a. full name;
b. title;
c. business address; and
d. business telephone number, electronic mail address and FAX machine number.

Overland Park, KS Home Office:

Physical Address:
11011 Cody
Overland Park, KS 66210

Mailing Address:
P.O. Box 25900
Overland Park, KS 66225

Office: (913) 451 – 8900
FAX: (913) 451 – 8324

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Curtis Lesslie, Director of Environmental Affairs	[curtis.lesslie@ashgrove.com]
Robert Vantuyl, Corporate Environmental Manager	[bob.vantuyl@ashgrove.com]
Eileen Flink, Vice President and General Counsel	[eileen.flink@ashgrove.com]
Gary Church, Assistant General Counsel	[gary.church@ashgrove.com]
Bob Dabler, Risk Manager	[bob.dabler@ashgrove.com]

Rivergate Plant:

Physical & Mailing Address:
13939 N. Rivergate Blvd.
Portland, OR 97203

Office: (503) 286 – 1677
FAX: (503) 289 – 2272

Gary Wright, Portland Operations Manager [gary.wright@ashgrove.com]
Glenn Dollar, Safety & Environmental Manager [glenn.dollar@ashgrove.com]

Portland Cement Terminal:

Physical & Mailing Address:
3737 N. Port Center Way
Portland, OR 97217

Office: (503) 285 – 4621
FAX: (503) 286 – 4987

John Hone, Import Terminal Manager [john.hone@ashgrove.com]

Western Region Office:

Physical Address:
5 Centerpointe Dr., Suite 350
Lake Oswego, OR 97035

Mailing Address:
P.O. Box 240
Lake Oswego, OR 97207

Office: (503) 207 – 2100
FAX: (503) 620 – 3491

Kenneth J. Rone, V.P. Mfg. Services- Western Div. [ken.rone@ashgrove.com]
Michael J. Hrizuk, V.P. – Mfg. [mike.hrizuk@ashgrove.com]
Hans E. Steuch, Technical Director – Western Div. (retired)
Paul D. Livesay, Controller [paul.livesay@ashgrove.com]
David H. Baker, V.P. – Sales [dave.baker@ashgrove.com]

3. If Respondent wishes to designate an individual for all future correspondence concerning this Site, please indicate here by providing that individual's name, address, telephone number, fax number and, if available, electronic mail address.

Eileen Flink, Vice President and General Counsel
Ash Grove Cement Company
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4. Identify each and every Property that Respondent currently owns, leases, operates on, or otherwise is affiliated or historically has owned, leased, operated on, or otherwise been affiliated with within the Investigation Area during the period of investigation (1937 – Present). Please note that this question includes any aquatic lands owned or leased by Respondent.

Question No. 4 requests the identification of Property; however, the term "identify" with respect to a Property is not defined in EPA's 104(e) request. The term "identify," is defined with respect to a natural person in Definition 4; with respect to a corporation, partnership, business trust, or other entity in Definition 5; and with respect to a document in Definition 6. Therefore, Ash Grove, relying on its professional judgment, provides the following information regarding facilities, easements, and leases:

- With respect to a facility, the term "identify" has been interpreted to mean the street address of the Property, as well as the approximate location of the Property on the Willamette River.

- With respect to an easement, the term "identify" has been interpreted to mean the corporation from which the easement has been obtained.

- With respect to an aquatic lands lease, the term "identify" has been interpreted to mean the lease number and the general terms of the lease.

Question No. 4 requests the identification of any aquatic lands owned or leased by the Respondent. Ash Grove's response is limited to those aquatic lands within the Investigation Area described in EPA's Request for Information (RFI).

Question No. 4 also requests the identification of each and every Property with which the Respondent is or has been otherwise affiliated. In EPA's April 8, 2008 response to suggestions for the 104(e) information request (specifically, the response to Question No. 4), Ms. Lori Houck-Cora of EPA states that "the question pertains to properties that the Respondent may have an affiliation with or relationship with, not another person or company." As such, Ash Grove interprets affiliations to include those relationships to properties which are granted through deed, easement, lease, or other such valid legal agreement.

The following properties are identified in response to Question No. 4:

- Rivergate Facility: Ash Grove Cement Company (Ash Grove) owns property in the Rivergate Industrial Park in Portland, Oregon located at 13939 Rivergate Rd., Portland, OR 97203. Ash Grove's property is located on the east shore of the Willamette River, at River Mile 2.8. This property was acquired in 1963 from the Port of Portland by warranty deed dated April 2, 1963 (recorded April 3, 1963).

- Terminal Facility[1]: Ash Grove owns property at 3737 N. Port Center Way, Portland, Oregon 97217. This property, consisting of a North Terminal and a South Terminal, is located on the east shore of the Willamette River, north of the Fremont Bridge between mile markers 10.1 and 10.5. The South Terminal was acquired in late 1992 from the Union Pacific Rail Road (UPRR) by special warranty deed dated Dec. 22, 1992 (recorded Dec. 29, 1992). The North Terminal was acquired in late 2005 from what Ash Grove understands is an affiliate of Columbia Gorge Aluminum Company (CGAC) by special warranty deed dated Dec. 22, 2005 (recorded Dec. 29, 2005).

- Unocal Easements: Ash Grove has two easements on Simplot Property (previously Unocal property) in the Rivergate Industrial Park in Portland, OR. These easements are held jointly with Oregon Steel Mills (OSM). Details regarding the locations of these easements are provided in the response to Question Nos. 10a and 13.

- Rivergate Leased Aquatic Land: Ash Grove leased aquatic land near the Rivergate Facility under the State of Oregon Division of State Lands Submerged and Submersible Land Lease ML-743 from April 1, 1989 to March 31, 2009. Details regarding the location of this lease are provided in response to Question No.12.

- Terminal Leased Aquatic Land: Ash Grove leases aquatic land near the Terminal Facility under the State of Oregon Division of State Lands Submerged and Submersible Land Lease

[1] The North and South Terminals are collectively referred to as "Terminal" or the "Terminal Facility," unless stated otherwise.

ML-10587, issued on January 23, 2006.[2] Details regarding the location of this aquatic land lease are provided in response to Question No. 12.

- Union Pacific Easement: Ash Grove has an access easement on Union Pacific Railroad Company property. Details regarding the location of this easement are provided in the response to Question No. 13a.

- Ash Grove Easements on Port of Portland Property: The Port of Portland granted Ash Grove access easements over three parcels of property at the time of Ash Grove's acquisition of the property in 1963. In 1985, Ash Grove and the Port of Portland entered into a permit and right of entry agreement for access over a portion of Ramsey Boulevard. Legal descriptions of these parcels are included in the response to Question No. 13a.

5. Provide a brief summary of Respondent's relationship to each Property listed in response to Question 4 above, including the Address, Multnomah County Alternative Tax lot Identification numbers(s), dates of acquisition, period of ownership, lease, operation or affiliation, and a brief overview of Respondent's activities at the Properties identified.

Rivergate Facility:

13939 N. Rivergate Blvd.
Portland, OR 97203

Ash Grove Cement Company (under its prior name Ash Grove Lime and Portland Cement Company) purchased Tax Lot No. 97126-0190 (formerly no. R325200) from the Port of Portland by warranty deed dated April 2, 1963 (recorded April 3, 1963). At the same time, the Port of Portland also granted Ash Grove a vehicular access/utilities easement as a precursor to the Port installing a public road adjacent to the premises.

Ash Grove Cement Company has owned the Rivergate Plant premises since the April 1963 date of purchase. The first phase of the lime plant was constructed and operational by 1964. At that time, the facility consisted of a barge mooring structure for receiving raw materials (e.g., limestone); material unloading, transporting and stockpiling systems; two calcimatic kilns; one hydrator; bulk storage silos; a warehouse; and an office. A third calcimatic kiln was put into production in 1977. A new hydrator was installed in 2001. The calcimatic kilns and hydrator produced quicklime and hydrated lime for Ash Grove until June 1, 2006 when Ash Grove discontinued lime production and leased a portion of its product handling facilities (e.g., principally its storage silos and conveyors and its hydrating facilities) to an unaffiliated third party -- Graymont Western US, Inc. (Graymont). Graymont continues to use those facilities to deliver lime products to its customers today under a lease with an original term from June 1, 2006 through Dec. 31, 2011 (with one 3 year option term possible thereafter).

[2] This aquatic land lease replaced the State of Oregon Division of State Lands Submerged and Submersible Land Lease ML-885 issued to Columbia Aluminum Corporation on April 24, 1992.

However, Ash Grove also continues to operate grinding mills on the Rivergate Plant premises to produce powdered limestone and dolomite and sell such products in the area. The first three of four limestone grinding mills were installed in 1985 and a fourth grinding mill was installed in 1997.

Terminal Facility:

3737 N. Port Center Way
Portland, OR 97217

The Terminal Facility property consists of two parcels of land acquired at different times.

Ash Grove acquired the first parcel (the "South Terminal Facility") from the Union Pacific Railroad ("UPRR") by special warranty deed dated Dec. 22, 1992 (recorded Dec. 29, 1992). In addition, UPRR granted Ash Grove a non-exclusive easement for access via a private road at the time of purchase. The South Terminal Facility's tax lot number is R649729800 (formerly tax lot nos. R237733 and R237739). Cement storage and distribution facilities were subsequently installed and the South Terminal was operational in December 1994. Since that date, the South Terminal has been used to distribute cement to customers in the Pacific Northwest. Cement is delivered to the South Terminal via rail cars primarily from Ash Grove cement plants located more than 100 miles outside of the Portland area. Upon arrival, the rail cars are unloaded into six (6) concrete storage silos. The cement is subsequently transferred into customer and independent carriers' tanker trucks. The expansion of the terminal with the addition of the North Terminal Facility (described below) now allows for cement imported from overseas to also be distributed to customers' and carriers' tankers via the South Terminal Facility's truck silos.

Ash Grove acquired the second parcel of property (the "North Terminal Facility") through statutory special deed dated Dec. 22, 2005 (recorded Dec. 29, 2005) from NSC Smelter LLC, which Ash Grove understands is an affiliate of CGAC through the bankruptcy process. The tax number for the North Terminal Facility parcel is R94120770 (formerly nos. R316000, R316011, R316051 and R316054). Cement imported from overseas sources is unloaded into three steel storage silos and then either loaded into railcars for distribution to Ash Grove's customers or transferred via rail cars or enclosed pipe conveyor [under construction] to the South Terminal Facility for distribution as described above.

6. Identify any persons who concurrently with you exercises or exercised actual control or who held significant authority to control activities at each Property, including:

a. partners or joint venturers;

None at either Rivergate or the Terminal except for the 50/50 joint venture between Ash Grove's subsidiary, Rivergate LFG, Inc and the Portland Landfill Gas Corporation to provide landfill gas to the Rivergate facility as described in response to Question No. 74 and 75 c.

b. any contractor, subcontractor, or licensor that exercised control over any materials handling, storage, or disposal activity on the Property; (service

contractors, remediation contractors, management and operator contractors, licensor providing technical support to licensed activities);

See list in Appendix 6. The list included in Appendix 6 includes those entities which current Ash Grove personnel were able to confirm exercise or exercised actual control or who held significant authority to control activities at the Rivergate and Terminal facilities.

c. **any person subleasing land, equipment or space on the Property;**

None except for land and equipment leased to Graymont Western US, Inc. (Graymont) since June 1, 2006 at the Rivergate facility as further described in responses to Question Nos. 5 and 30 b.

d. **utilities, pipelines, railroads and any other person with activities and/or easements regarding the Property;**

See list in Appendix 6.

e. **major financiers and lenders;**

None regarding the Rivergate or Terminal properties.

f. **any person who exercised actual control over any activities or operations on the Property;**

See lists in Appendix 6 and Appendix 38.

g. **any person who held significant authority to control any activities or operations on the Property;**

See lists in Appendix 6 and Appendix 38.

h. **any person who had a significant presence or who conducted significant activities at the Property; and**

See lists in Appendix 6 and Appendix 38.

i. **any governmental entities that had proprietary (as opposed to regulatory) interest or involvement with regard to the activity on the Property.**

Oregon Department of State Lands (DSL) as lessor regarding the aquatic leases described in the response to Question No. 12.

City of Portland Combined Sewer Overflow (CSO) pipeline easement regarding the South Terminal site as described in the response to Question Nos. 10 a and 13c. Ash Grove has no control over the operation of this pipeline.

7. Identify and describe any legal or equitable interest that you now have, or previously had in each Property. Include information regarding the nature of such interest; when, how, and from

whom such interest was obtained; and when, how and to whom such interest was conveyed, if applicable. In addition, submit copies of all instruments evidencing the acquisition or conveyance of such interest (e.g., deeds, leases, purchase and sale agreements, partnership agreements, etc.).

See responses to Question Nos. 4, 5 and 10a.

8. If you are the current owner and/or operator, did you acquire or operate the Property or any portion of the Property after the disposal or placement of hazardous substances, waste, or materials on, or at the Property? Describe all of the facts on which you base the answer to this question.

See response to Question Nos. 9 and 10a.

9. At the time you acquired or operated the Property, did you know or have reason to know that any hazardous substance, waste, or material was disposed of on, or at the Property? Describe all investigations of the Property you undertook prior to acquiring the Property and all of the facts on which you base the answer to this question.

Question No. 9 contains the phrase "at the time you acquired or operated the Property." Ash Grove has interpreted this phrase to mean "at the time you *initially* acquired or *began operation at* the Property." Therefore, Ash Grove assumes that the request characterized by Question No. 9 pertains to Ash Grove's knowledge of Property contamination immediately prior to Ash Grove's acquisition of the Property or Ash Grove's commencement of operations.

Ash Grove's present-day Portland distribution terminal was acquired in two separate phases. These property acquisitions are referred to as the North Terminal and South Terminal. Accordingly, the North Terminal and South Terminal are addressed separately in the following sections:

<u>North Terminal:</u>

Ash Grove purchased the North Terminal site from CGAC by statutory special deed dated Dec. 22, 2005 (recorded Dec. 29, 2005). At the time of the purchase, the following information was known to Ash Grove based on the Environmental Site Assessments (ESAs) described below:

- The North Terminal site was used by CGAC for the transfer of alumina from ocean-going ships to railcars. In the process of transferring alumina, trace amounts of alumina may settle on the soil from fugitive air. Additionally, a small accumulation of alumina on the soil surface between storage silos had been observed in a 1993 site assessment.

- A 1993 site assessment noted a 1939 aerial photograph of the site that appeared to indicate that fill material had been placed on the site. The assessment speculated that the fill material may have been sediment dredged from the river bottom.

- A 2000 site assessment noted from a review of a 1957 aerial photograph that fill material had been placed at the facility to facilitate site development.

- The 2005 site assessment indicated that four 1,000-gallon underground storage tanks (USTs), three diesel and one gasoline, had been present at the North Terminal property. Two of the USTs were removed in 1982, while the other two USTs were removed in 1989. Interviews with individuals who worked at the CGAC facility during this time reported no evidence of leaks or contamination during the tank excavations.

- The 2005 site assessment indicated that on December 27, 1991, a ship (the Tai Chung) docked at the facility property spilled approximately 8,000 gallons of bunker C fuel oil. The response effort was able to recover most of the spilled fuel.

- The adjacent UPRR property had continuously served as a railroad switching yard since approximately 1880. The UPRR site (though not necessarily the portion of UPRR property purchased by Ash Grove) had a long history of documented spills of oil, pesticide, and paint waste materials recorded since 1972. A 1990 site assessment of the adjacent South Terminal property conducted for Ash Grove includes the following statement: "it seems very likely that spills similar to those listed above may have occurred from time to time prior to 1972."

Prior to Ash Grove's purchase of the North Terminal from CGAC in late 2005, Ash Grove had a Phase I ESA prepared by Maul Foster & Alongi, Inc. (MFA) of Vancouver, Washington. The scope of MFA's review included (1) a review of regulatory agency records (contracted with Environmental Data Resources (EDR) of Milford, Connecticut); (2) a review of historical land use records; (3) a site reconnaissance visit; (4) interviews with relevant CGAC staff; and (5) preparation of a report. Additionally, the site assessment relied on information from three prior site assessments (1993, 1998, and 2000) conducted on behalf of CGAC.

South Terminal:

Ash Grove purchased the South Terminal site from UPRR by special warranty deed dated Dec. 22, 1992 (recorded Dec. 29, 1992). Prior to Ash Grove's purchase of the South Terminal site from UPRR, Ash Grove had an environmental site assessment prepared by Northwest Geological Services, Inc. (NGS) of Portland, Oregon on June 15, 1990. The review discussed the presence of dump debris, irregular topography and uncontrolled fills on the site, spills on adjacent property, hydrocarbon contamination, previous facility foundations, and creosoted pilings. At the time of the purchase, the following information was known to Ash Grove based on the 1990 Phase I ESA:

- The prior use of the South Terminal site was for a sand and gravel operation. Irregular topography of the site indicated several large excavation areas with deposits of sand and gravel.

- Several thousand cubic yards of dump debris, consisting of household garbage, lawn and shrub cuttings, tires, furniture, carpets, soil, excess asphaltic concrete mix, foundry sand, crushed stone, rocks, and construction rubble (asphaltic concrete, concrete, and brick) had been placed on the site.

- The presence of dump debris (sand and crushed stone) and hydrocarbon contamination of soils at the site was noted during a June 12, 1990 site reconnaissance visit.

- Creosoted piling supports were present beneath the surface from structures that were located at the site prior to 1937.

- The adjacent UPRR property had continuously served as a railroad switching yard since approximately 1880. The UPRR site (though not necessarily the portion of UPRR property purchased by Ash Grove) had a long history of documented spills of oil, pesticide, and paint waste materials recorded since 1972. A 1990 site assessment of this property conducted for Ash Grove includes the following statement: "it seems very likely that spills similar to those listed above may have occurred from time to time prior to 1972."

Rivergate Facility:

Ash Grove has not identified any information in its files related to investigations or knowledge of disposal activities, nor has any former employee reported any at the Rivergate property at the time that property was acquired. It should be noted that, to Ash Grove's knowledge, the Rivergate property was undeveloped prior to Ash Grove's acquisition of the property from the Port of Portland in April 1963.

10. Identify all prior owners that you are aware of for each Property identified in Response to Question No. 4. For each prior owner, further identify if known, and provide copies of any documents you may have regarding:

Ash Grove combined its narrative answers to Question Nos. 10 and 11 in this response because the owner has often been the operator throughout the history of the facilities, or the relationship between owner and operator is unclear from available records. Copies of documents requested under this question number are included in Appendix 10.

a. the dates of ownership;

The dates of ownership of the Properties identified in response to Question No. 4 are provided below as is available information about operations under prior owners.

- Rivergate Facility: Per a warranty deed dated April 2, 1963 (recorded April 3, 1963) the Port of Portland was the prior owner of the Rivergate property. A copy of this deed is included in Appendix 10.

- Rivergate Leased Aquatic Land: To the best of Ash Grove's information and belief, Ash Grove does not have any documentation identifying prior leaseholders of this land. See Appendix 12 for a copy of the aquatic land lease.

- Ash Grove Easements on Simplot Property: Ash Grove has two easements on Simplot Property (previously Unocal property) in the Rivergate Industrial Park in Portland, Oregon. These easements are held jointly with OSM. The first easement runs along the bank of the

Willamette River at the north end of Simplot's property. The second easement runs along the west end of Simplot's property, just inland from the Willamette River from OSM's property on the north to the Port of Portland's right-of-way known as Ramsey Boulevard on the South. Details regarding the locations of these easements, including legal descriptions, are provided in the response to Question No. 13a. Based on a review of available documents, these easements were obtained for the purpose of constructing, operating, maintaining, repairing, and replacing an underground natural gas pipeline cooperatively with OSM. Except for the purchase of Unocal's property by Simplot, which to the best of Ash Grove's knowledge occurred in the 2000 timeframe, Ash Grove is not aware of and has no records regarding the prior owners of lands associated with these easements. Copies of these easements are provided in Appendix 10.

- Ash Grove Easements on Port of Portland Property: An access easement, dated April 2, 1963, was granted by the Port of Portland for three distinct parcels of property owned by the Port of Portland, two of which are used currently by Ash Grove for ingress and egress. Additionally, a permit and right-of-entry between the Port of Portland and Ash Grove dated October 4, 1985, for Ash Grove's use of the portion of Ramsey Boulevard that is adjacent to the Rivergate facility, was identified during the records review process. Copies of both the 1963 access easement and the 1985 permit and right-of-entry are included in Appendix 10. Legal descriptions of these parcels are included in the response to Question No. 13a.

- South Terminal Facility: Ash Grove acquired the South Terminal property from UPRR by a special warranty deed dated December 22, 1992 (recorded December 29, 1992). A copy of this deed is included in Appendix 10. The South Terminal property acquired was a small part of a much larger UPRR-owned property, known as the Albina Railyard, from the beginning of the investigation period (in 1937) until Ash Grove's acquisition of the property in late 1992. Based on Ash Grove's review of records, the adjacent property has continuously served as a rail switching yard for some 110 years. According to Ash Grove's Phase I ESA, structures on UPRR's Albina Railyard included numerous tracks, offices, a trucking terminal, warehouses, shops, an oil-water separator, and a fueling facility with a 150,000 gallon above ground fuel tank. An underground tank registration indicates that UPRR had five underground storage tanks at the Albina facility. Two of the tanks were decommissioned in 1986, while the other three tanks were decommissioned by June 1990. It is unclear which, if any, of these tanks or other structures identified by the UPRR site assessment were on the parcel of land acquired by Ash Grove.

- North Terminal Facility: Ash Grove acquired the North Terminal property at 2600 N. River Street Portland, Oregon from NSC Smelters LLC D/B/A CGAC by a statutory special warranty deed dated December 22, 2005 (recorded December 29, 2005). A copy of this deed is included in Appendix 10. The information pertaining to prior owners is based on Ash Grove's Phase I ESA conducted in 2005, which includes historical site assessments for the property conducted by prior owners. A list of prior owners, and a summary of available information regarding the owner and its operations follows[3]:

[3] The information regarding prior owners is contradictory, so the site assessments from which all information was pulled are identified in this response. The 1993 site assessment was conducted by Science and Engineering Analysis

- **Oregon Washington Railroad and Navigation Company (also identified as Oregon/Washington Railroad and Navigation Company)**
  - 1993 Site Assessment: The Oregon/Washington Railroad and Navigation Co. sold the property to the Union Pacific Railroad in 1959.
  - 2005 Site Assessment: A Sanborn map from 1924 identifies this owner. The property was used as a grain storage facility at this time.
- **Union Pacific Railroad:**
  - 1993 Site Assessment: UPRR purchased the property from Oregon/Washington Railroad and Navigation Co. in 1959 and subsequently sold the property to Harvey Aluminum Co. in 1964.
  - 2005 Site Assessment: A 1950 Sanborn map identifies UPRR as the owner of the property. The property was leased to Kerr Gifford Company in 1950. Operations consist of a "UPRR Dock and a Northwest Marine and Elevator Dock." A grain warehouse was located on the property at this time.
- **Kerr Gifford Company (also identified as Kerr Grain Corporation):**
  - 2000 Site Assessment: A grain shipment facility was operated by Kerr Grain Corporation prior to the time of Harvey Aluminum's operation. The grain loading facility was destroyed in a fire in 1966.
  - 2005 Site Assessment: A Sanborn map from 1950 indicates that the property was owned by UPRR and leased to Kerr Gifford.
- **General Ore Inc.:**
  - 1993 Site Assessment: A city directory review, conducted in five year increments, shows that General Ore Inc. was an owner of the property at 2600 North River Street in 1965, 1970, 1975, and 1980.
  - 2000 Site Assessment: Records indicate that General Ore Inc. owned the property from 1965 to 1982. However, based on this 2000 site assessment, Harvey Aluminum is believed to be the operator of the facility from 1957 to 1971.
- **Harvey Aluminum:**
  - 1993 Site Assessment: The property was purchased by Harvey Aluminum from UPRR in 1964.
  - 2000 Site Assessment: Harvey Aluminum owned the property from 1957 to 1971. Harvey Aluminum constructed an alumina vacuum-type ship unloader at the facility in 1957. During Harvey Aluminum's operation, a grain shipment facility operated on the southern portion of the property. This facility was destroyed in a fire in 1966.
- **Martin Marietta Aluminum**
  - 1993 Site Assessment: A city directory review shows that Martin Marietta Aluminum was the owner of the property at 2600 North River Street in 1985.
  - 2000 Site Assessment: Based on this site assessment, Martin Marietta Aluminum owned the property from 1971 to 1984.
- **Commonwealth Aluminum Corporation:**

Corporation (SEACOR) for Columbia Aluminum Corp. The 2000 site assessment was conducted by CH2M Hill for Goldendale Aluminum Corp. The 2005 site assessment was conducted by Maul Foster & Alongi, Inc. for Ash Grove.

- 1993 Site Assessment: According to this site assessment, Commonwealth Aluminum sold the property to Columbia Aluminum Corporation in 1987.
- 2000 Site Assessment: Based on this site assessment, Commonwealth Aluminum Corporation owned the property from 1984 to 1987.

- **Columbia Aluminum Corporation (also identified as Goldendale Aluminum Company and NSC Smelters LLC D/B/A CGAC):**
  - 1993 Site Assessment: CGAC purchased the property from Commonwealth Aluminum Corporation in 1987.
  - 2000 Site Assessment: CGAC purchased the site from Commonwealth Aluminum and owned the property until May 1996, when it changed its name to Goldendale Aluminum Company. Goldendale Aluminum Company owned the facility until it was purchased by Ash Grove in December 2005 (statutory special warranty deed dated December 22, 2005, recorded December 29, 2005).

- Terminal Leased Aquatic Land: Based on the documents reviewed, CGAC was the prior lease holder of the aquatic land identified in Submerged and Submersible Land Lease ML-10587. The original lease held by CGAC was Submerged and Submersible Land Lease ML-855. This lease was eventually replaced by ML-10587 to reflect the change in ownership of the North Terminal. See Appendix 12 for copies of both aquatic land leases.

- Ash Grove Easement on UPRR Property: Ash Grove has an access easement on the UPRR property adjacent to the Terminal facility. A copy of this easement is provided in Appendix 10. Details regarding the location of this easement are provided in the response to Question No. 13a. Ash Grove is not aware of and has no records regarding the prior owners of lands associated with this easement.

- UPRR Easement on Ash Grove Property: To the best of Ash Grove's information and belief, UPRR has had an easement on Ash Grove's South Terminal property since the time this property was acquired from UPRR by special warranty deed dated December 22, 1992 (recorded December 29, 1992). UPRR maintains this easement as the operator of stormwater drainage lines that originate on UPRR property but traverse Ash Grove property prior to discharge in the Willamette River through various outfalls. Ash Grove does not currently and has not had control over the operations of these drainage lines and outfalls. A copy of this easement could not be located during Ash Grove's record review, but the easement may be found in the Multnomah County Easement Record (book 68, pages 362-367; June 9, 1984).

- City of Portland Easements on Ash Grove Property: The City of Portland has had easements on Ash Grove's South Terminal property since March 2008. The easements include a Permanent Tunnel Easement, Permanent Shaft Easement, Permanent Access Easement, and a Permanent Pipeline Easement. The City of Portland maintains the easements as the owner of a planned combined sewer overflow line that traverses Ash Grove property prior to discharge in the Willamette River.

b. all evidence showing that they controlled access to the Property; and

Ash Grove is not aware of any evidence specifically showing the extent to which prior owners controlled access to the Properties.

c. all evidence that a hazardous substance, pollutant, or contaminant, was released or threatened to be released at the Property during the period that they owned the Property.

For information regarding releases or contamination related to prior owners, please refer to the responses to Question Nos. 9, 15 and 71.

11. Identify all prior operators, including lessors, that you are aware of for each Property identified in response to Question No. 4. For each such operator, further identify if known, and provide copies of any documents you may have regarding:

a. The dates of operation
b. The nature of prior operations at the Property
c. All evidence that they controlled access to the Property
d. All evidence that a hazardous substance, pollutant, or contaminant was released or threatened to be released at or from the Property during the period that they were operating the Property

Narrative responses to Question No. 11 are included above in the responses to Question No. 10. Copies of documents requested under this question are found in Appendix 10.

12. If not included in response to any of the previous questions, please describe the purpose and duration of each aquatic lands lease Respondent or the operator of Respondent's Property(ies) ever obtained from the State of Oregon and provide a copy of each application for and aquatic lands lease obtained.

Rivergate Facility: Ash Grove was issued Submerged and Submersible Land Lease No. ML-743 on May 16, 1989 for the purpose of maintaining a private dock at the Rivergate facility. This term of the lease was originally April 1, 1989 through 12:00pm on March 31, 2009. By letter received from the Oregon DSL on February 2, 1995, lease number ML-743 was changed to lease number LE-5146, because of reorganization at the DSL. The wording of the 'purpose' sections was also changed slightly, as LE-5146 indicates that it was obtained for the purpose of maintaining a boat house. Ash Grove terminated the lease (effective March 31, 2000) because the boat house was removed. Correspondence between Ash Grove and the state of Oregon, which includes images documenting this removal of the boat house, can be found in Appendix 12. To the best of Ash Grove's information and belief, there are currently no Submerged and Submersible Land Leases for the Rivergate facility.

Terminal Facility: At the time that Ash Grove completed its purchase of the North Terminal from CGAC in 2006, Lease No. ML-10587 was issued to Ash Grove to replace ML-885 (originally issued to CGAC in 1998 for a term ending in 2018). Lease No. ML-10587 issued to Ash Grove covered the remainder of the original term, through November 30, 2018. The sole authorized use under the lease is silo storage of cement and alumina at the unloading facility. By its terms, the aquatic land lease covers a portion of land under silo #3 encompassing an area of approximately 0.04 acres.

Documents requested in Question No. 12 are included in Appendix 12.

13. Provide the following information about each Property identified in response to Question 4:

Question No. 13 requests that Ash Grove "provide the following information about each Property." It is unclear as to precisely what information EPA is requesting for each subpart.

- In subparts b and c of Question No. 13, the location of underground utilities and underground pipelines are requested. Ash Grove has elected to provide site maps which clearly identify the requested information.
- In subparts d through g of Question No. 13, surface structures, over-water structures, dry wells, and treatment and control devices are requested. In this case, Ash Grove has interpreted the language "provide the following information" to ask for a listing of requested items in general terms.

a. Property boundaries, including a written legal description;

- Rivergate Facility:

i. Current tax lot: 97126-0190 (formerly no. R325200)

ii. Legal description: Beginning at a point in Government lot 6, Section 27, Township 2 North, Range 1 West, Willamette Meridian, which point is the Northeast Corner of that certain tract of land conveyed by S. I. Ogden and Ellie Ogden, his wife, to T. A. Ketchum and F. C. Knapp, by deed recorded September 20, 1908, in book 435, Page 125 deed records of Multnomah County, which point is marked by a 3 inch steel pipe and brass cap;

Thence continuing due East 322.59 feet to the line between Sections 26 and 27, of sold township, from which point the corner between Sections 26, 27, 34, and 35 bears South 0' 06' 16" West 543.0 feet and the ¼ feet;

Continuing thence due East 1203.96 feet to a 3 inch steel pipe and brass cap from which point the South ¼ corner of Section 26 bears North 35' 08' 23" East 2545.24 feet;

Continuing thence due North 707.92 feet to a 3 inch steel pipe and brass cap;

Thence due West 1202.05 feet to the line between sections 26 and 27 from which point the West ¼ corner of Section 26 bears North 0' 06' 16" East 1374.54 feet;

Then continuing due West 478.07 feet to a 3 inch steel pipe and brass cap;

Thence due West 190 feet more or less to the ordinary low water line of the Willamette River;

Thence Southerly along the low water line 70 feet more or less to a point due West of the point of the beginning;

Thence due East 124 feet more or less to a 3 inch steel pipe and brass cap;

Thence continuing due East 165.72 feet to the point of beginning.

iii. Property boundaries of the Rivergate facility are outlined in Appendix 13 a.

- Terminal Facility:

  i. South Terminal:

     - Lot/Block/Addition: Parcel 1 Flat 1922-164
     - Current tax lot: R649729800 (formerly tax lot numbers R237733 and R237739)[4]
     - NE Quarter, Section 28, Township 1 North, Range 1 East
     - Site Size: 6.94 acres total

  ii. North Terminal:

     - Current tax lot: R94120770 (formerly tax lot numbers R316000, R316011, R316051, and R316054)[5]
     - Section 21, Township 1 North, Range 1 East
     - Site Size: 7.7 acres

  iii. Property boundaries for the Terminal facility are outlined in Appendix 13 a.

- Unocal Easements:

  i. Easement A: Said easement being 100 feet in width, lying 50 feet on each side of the following described center line:

     Beginning at the southwesterly corner of Section 26, Township 2 North, Range 1 West, of the Willamette Meridian in the County of Multnomah, State of Oregon,

[4] The tax lot is identified as Tax Lots 2, 25, and 31 on tax map 2628 in a Joint Permit application submitted to the U.S. Army Corps of Engineers and the Oregon Division of State Lands in 1992.

[5] The tax lot is identified as tax lots 33, 77, and parts of 75 in a 1979 City of Portland Report and Decision of the Hearings Officer concerning proposed dredging to be conducted by a prior owner of North Terminal.

Thence east 1205.42 feet to the east line of Ash Grove Cement West, Inc., extended as recorded in Book 2161, page 237 of the Multnomah County Deed Records;

Thence north 1675.09 feet to the southern line of Oregon Steel Mills, a division of Gilmore Steel Corporation, as recorded in Book 586, page 1355 of the Multnomah County Book of Records;

Thence along a 75 degrees 45'-20" curve to the left having a radius of 358.10 feet a distance of 473.47 feet;

Thence north 8 degrees 23'-12" east a distance of 220.00 feet to the True Point of Beginning;

Thence north 88 degrees 20'-00" west a distance of 201.38 feet more or less to the Harbor Line of the Willamette River.

ii. Easement B: Said easement being 20 feet in width, lying 10 feet on each side of the following described center line:

Beginning at the southwesterly corner of Section 26, Township 2 North, Range 1 West, of the Willamette Meridian in the County of Multnomah, State of Oregon,

Thence north 1343.64 feet, thence west 430.28 feet to a point 943.50 feet west of the southeast corner of a parcel belonging to Unocal Chemical Division as recorded in Book 615, page 1400 of the Multnomah County Book of Records, and the True POINT OF BEGINNING;

Thence north 6 degrees 0'-23" east a distance of 430.30 feet;

Thence north 0 degrees 53'-03" west a distance of 244.62 feet;

Thence north 18 degrees 18'-09" east a distance of 332.56 feet to a point on the north line of the Unocal parcel being north 75 degrees 45'-20" west a distance of 745.74 feet from the northeast corner of said parcel.

- Rivergate Leased Aquatic Land: The leased property includes the state-owned submerged land fronting Tax Lot 19, Section 26, Township 2 North, Range 1 West, Willamette Meridian, Multnomah County, Oregon, located within the following described parcel (The term of this lease commenced on April 1, 1989 and will expire on March 31, 2009):

Commencing at a point on the South line of said Tax Lot 19, said point also being on the line of Ordinary High Water; thence riverward perpendicular to the thread of the stream of the line of Ordinary low Water and the TRUE POINT OF BEGINNING; Thence continuing riverward along said perpendicular line 100 feet to a point; thence northerly parallel to said line of Ordinary Low Water 400 feet to a point;

Thence shoreward perpendicular to the thread of the stream 100 feet to a point on said line of Ordinary Low Water;

Thence southerly along said line of Ordinary low Water 400 feet, more or less to the TRUE POINT OF BEGINNING, containing 0.92 acres more or less.

- Terminal Leased Aquatic Land: The leased property includes the submerged lands fronting tax lot 400 in the SW ¼ of Section 21, Township 1 North, Range 1 East, Willamette Meridian (Multnomah County Assessor's Map 1N1E21CD) which lies beneath silo #3 as shown in Exhibit A of the lease. The term of this lease commenced on December 31, 1998 and will expire on November 30, 2018.

- Union Pacific Easement: A parcel of land in the Northeast Quarter of Section 28, Township 1 North, Range 1 East, Willamette Meridian, Multnomah County, Oregon being more particularly described as Follows:

  i. Tract A of Partition Plat 1992-164 as recorded in the Multnomah County Records

  ii. Parcel 1 and Tract B of Partition Plan 1992-164 as recorded in the Multnomah County Records

b. Location of underground utilities (telephone, electrical, sewer, water main, etc.);

Terminal: Drawings showing the location of underground utilities can be found in Appendix 13 b.

Note that the City of Portland CSO project pipeline, currently under construction, is not shown in the recent facility utility drawings. As such, Exhibit A and B of the Permanent Pipeline Easement between Ash Grove and the City of Portland have been included in Appendix 13 b. These exhibits depict the location of the CSO pipeline. Ash Grove has no control over operation of this CSO pipeline.

Rivergate: Drawings showing the location of underground utilities can be found in Appendix 13 b. The utility drawings in Appendix 13 b include both the Rivergate facility and the nearby Unocal (Simplot) easements.

c. Location of all underground pipelines whether or not owned, controlled or operated by you;

Terminal: Drawings showing the location of underground pipelines can be found in Appendix 13 b.

Two pipelines located on the South Terminal property are not owned, controlled, or operated by Ash Grove. A pipeline originating on the adjacent UPRR property traverses Ash Grove's property prior to discharge into the Willamette River. Ash Grove has no information about this pipeline except for its discharge location. The City of Portland CSO project pipeline, currently under construction, is also not owned, controlled, or operated by Ash Grove. As these pipelines are not included in recent facility utility drawings, separate drawings are included to show the location of these pipelines in Appendix 13 b.

Rivergate: Drawings showing the location of underground pipelines can be found in Appendix 13b. The utility drawings in Appendix 13b include both the Rivergate facility and the nearby Unocal easements.

d. Surface structures (e.g., buildings, tanks, pipelines, etc.);

Terminal: Surface structures at the Terminal facility include the following, as identified in Appendix 13a. For a listing of over-water structures, see the response to Question No. 13.e.

North Terminal:

- Boat House
- Garden Shed
- Four Rail Car Movers
- Rail Load Out Building
- 7-Bay Garage
- 500-Gallon Diesel Above Ground Storage Tank
- 300-Gallon Used Oil Tank
- 125-Gallon Propane Tank
- Transformer
- Vault
- Administration Building and Shop
- Silo #1
- Silo #2
- Silo #3
- Reclaim System Tower
- Conveyor System

South Terminal:

- Shop
- Offices and Lab

- Truck Wash Facility including a pH adjustment system and a concrete settling basin
- Concrete Silos
- Permitted Discharge Area[6]
- Conveyor System
- Holding Tank
- Concrete Bunker

Rivergate: Surface structures at the Rivergate facility include the following, as identified in Appendix 13a. For a listing of over-water structures, see the response to Question No. 13e.

- Conveyor System (system is both above ground and underground)
- Product Stockpiles
- Settling Basins
- Two Electric Substations
- Parts Room/Lunch Room/Change Room/Lab Building
- Maintenance Shop
- Fuel Oil Storage Containment Structure, including a 425,000 gallon tank, a 25,000 gallon tank, and a 4,000 gallon tank
- Kiln Department (permanently decommissioned in May 2006), including three calcimatic kilns and a kiln control room
- Hydrator Department, including a hydrator
- Packaged Lime Storage Structure
- Warehouse
- Office Building
- Ag Mill Department , including 4 roller mills
- Material Storage Structures, including lime bins, hydrate silos, and crushed limestone tanks)
- Settling basins located throughout the facility (for specific locations see the response to Question 16)
- 200-Gallon Propane Tank

e. Over-water structures (e.g., piers, docks, cranes, etc.);

Terminal: Over-water structures at the Terminal facility include the following, as identified in Appendix 13a.

North Terminal:

- Ship Unloader and Blower Room
- Dock

South Terminal:

- Barge Moorage Structure

[6] The discharge area is permitted under the General Water Pollution Control Facilities Permit (1700-B), issued on November 7, 2007.

Rivergate: Over-water structures at the Rivergate facility include the following, as identified in Appendix 13a.

- Limestone Barge Unloading System, including a Clamshell Crane

f. Dry wells;

Rivergate: To the best of Ash Grove's knowledge and belief, no dry wells were installed nor are any present at the facility.

Terminal: To the best of Ash Grove's knowledge and belief, no dry wells were installed nor are any present at the facility.

g. Treatment or control devices (e.g., surface water, air, groundwater, Resource Conservation and Recovery Act (RCRA), Transfer, Storage, or Disposal (TSD), etc.);

The response to Question No. 13.g is provided in Table 13-1 for the Terminal and Table 13-2 for Rivergate.

TABLE 13-1. POLLUTION CONTROL DEVICES AT THE TERMINAL FACILITY

Process/Activity	Control Device
Ship unloading	Baghouse
Conveyor to north storage tanks	Baghouse
North storage tanks	Baghouse
Rail car load-out	Baghouse
Rail unloading reclamation	Baghouse
Truck load-out pipe conveyor	Baghouse
Rail car unloading	Baghouse
South terminal storage silos	Baghouse
Truck load	Baghouse
Truck wash system (pH adjustment of used wash water)	pH adjustment
Stormwater drainage system (vault)	pH adjustment
Stormwater drainage system	Filters

TABLE 13-2. POLLUTION CONTROL DEVICES AT THE RIVERGATE FACILITY

Process/Activity	Control Device
Calcimatic Kilns 1, 2[7]	Baghouse
Calcimatic Kiln 3	Baghouse
Roller Mill/Dryer 1-3	Baghouse
Roller Mill/Dryer 4	Baghouse
Hydrator	Baghouse

h. Groundwater wells, including drilling logs;

Rivergate: A groundwater well is located at the Rivergate facility. Per the Certificate of Water Right, issued by the State of Oregon, County of Multnomah, dated June 17, 1966, the well is located 912 feet north and 375 feet east from the southwest corner of Section 26. The water well was installed in 1963. The well is steel-cased, extends to a depth of 150 feet, and is capable of producing 500 gallons per minute (gpm) of clear water. The water from the well is pumped to an elevated storage tank that sits on top of the hydrate storage silo at an elevation of approximately 90 feet. The water from this tank is then gravity fed to the plant processes that require water, which primarily involve non-contact cooling operations. A site plan showing the location of the well can be found in Appendix 13h.

Ash Grove was unable to locate a drilling log for this groundwater well during the records review process.

Terminal: No groundwater wells exist at the Terminal facility.

i. Storm water drainage system, and sanitary sewer system, past and present, including septic tank(s) and where, when and how such systems are emptied and maintained;

Rivergate: No stormwater management system exists at the Rivergate facility, as stormwater infiltrates the ground naturally. During periods of unusually heavy rain, stormwater could potentially enter the ditch leading to Outfall 001.[8] For this reason, the outfall at Rivergate is permitted under the National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit No. 102465 (expires January 31, 2010). Historically, the outfall was primarily used for the discharge of non-contact cooling water from the calcining department up to 1973. According to Ash Grove personnel at the Rivergate facility, releases through the outfall since then have been infrequent and in

[7] It should be noted that the calcimatic kilns and corresponding pollution control equipment are no longer operational, but, as of the effective date of this submission, this equipment is still at Rivergate.

[8] Outfall 001 is the only outfall at the Rivergate facility and, historically, was connected to the facility's non-contact cooling water circulation system. See the response to 18e for additional information.

connection with heavy rain events that have occurred two to three times over the past fifteen years.

Rivergate operated a septic tank from 1964 until approximately 2002, when the facility was connected to the city sewer system. According to Ash Grove personnel at Rivergate, emptying or maintenance of the septic tank was not required. Solids deteriorated within the septic tank while water flowed out of the septic system to infiltrate the ground in the drain field. A drawing of the sanitary sewer system, including the septic tank, can be found in Appendix 13i.

Terminal: Stormwater at the Terminal facility either infiltrates the ground or is discharged to the Willamette River. For stormwater management purposes, the Terminal property is divided into seven drainage areas or basins. The specific location and boundaries of each drainage basin are described in Ash Grove's Stormwater Pollution Control Plan (SWPCP), which is provided in Appendix 19. In addition, drawings prepared for this response depict the drainage systems for the North and South Terminal properties and are included as Figure 13-1 and Figure 13-2, respectively.

- Drainage Basin 1 (North Terminal) – Drainage Basin 1 includes the paved areas south of the rail loadout building, east of the silos, and west of the rail car movers in the North Terminal. This basin also includes the stormwater that is collected in stormwater drains inside the rail loadout building and trench drains at both ends of the loadout building. The material offloaded in this area is isolated from stormwater using the site controls described in the facility's SWPCP. Stormwater collected in Drainage Basin 1 drains through stormwater drains or trench drains to a pipe network and vault before discharging from Outfall 4. The stormwater treatment system became operational in early 2007, around the time the first ship was unloaded at the North Terminal. The vault acts as a settling basin before stormwater is discharged from Outfall 4 to the Willamette River. Outfall 4 is permitted under General NPDES Stormwater Permit Number 1200-Z. According to Ash Grove personnel, during Ash Grove's construction of the North Terminal property in late 2006, River City Environmental was hired to clean each stormwater drain on the property and stormwater drain filters were installed on the main drains thereafter.
- Drainage Basin 2 (North Terminal) – Drainage Basin 2 includes the northern portion of the North Terminal, the graveled railroad spur tracks, the garden storage shed, the boat house, an asphalt parking lot, the 500-gallon diesel AST, and the garage. Stormwater accumulated in Drainage Basin 2 infiltrates into the ground.
- Drainage Basin 3 (North Terminal) – Drainage Basin 3 consists of the piling-supported concrete dock at the North Terminal, which includes the shop, administration building, and the pneumatic unloading system. Most stormwater runoff from Drainage Basin 3 either infiltrates into the ground or discharges directly to the Willamette River by sheet flow; however, Ash Grove has minimized the stormwater sheet flow that is discharged to the Willamette River

from this area through the implementation of sand bags near the river bank to promote ground infiltration of stormwater.[9] Stormwater that falls within the reclaim system air lift pit and the ship unloading air lift pit is pumped to the stormwater drainage system, where pH is adjusted prior to being discharged to the Willamette River through Outfall 4.

- Drainage Basin 4 (North Terminal) – Drainage Basin 4 includes the southern part of the North Terminal, the graveled railroad spur tracks, and the cement reclaim system. Note that reclaim operations are unlikely to impact stormwater runoff, as the material is conveyed through an enclosed system. Stormwater accumulated in Drainage Basin 4 infiltrates into the ground.
- Drainage Basin 5 (South Terminal) – Drainage Basin 5 consists of the facility roadway and landscaped areas in the northern portion of the South Terminal. This drainage basin includes the truck wash area. Stormwater accumulated in Drainage Basin 5 infiltrates into the ground. Stormwater in the immediate area around the truck wash flows through the drain that conveys the wash water to a pH adjustment system and then to a permitted discharge area. Specifically, the truck wash operation and discharge area are permitted under the General Water Pollution Control Facilities Permit (1700-B) and are not part of the facility's NPDES permit. Accordingly, the truck wash system is described in detail in the response to Question No. 13g.
- Drainage Basin 6 (South Terminal) – Drainage Basin 6 includes the facility roadway and landscaped lawn areas in the south part of the South Terminal, as well as the area around the South Terminal silos and the silo bypass road. Stormwater in Drainage Basin 6 either infiltrates into pervious areas of the ground or discharges via sheet flow to the Willamette River. Based on interviews with facility personnel, cement dust is rarely observed in this area, so stormwater sheet flow is unlikely to transfer significant quantities of cement dust to the river. The City of Portland Bureau of Environmental Services, which is the agency that works cooperatively with Oregon Department of Environmental Quality (ODEQ) to oversee stormwater management practices at the Terminal facility, approved this management strategy during an on-site inspection (see Appendix 13i).
- Drainage Basin 7 (North Terminal and South Terminal) – Drainage Basin 7 includes the bank of the Willamette River (for both the North Terminal and South Terminal), as well as the three North Terminal storage silos. Stormwater in Drainage Basin 7 either infiltrates into pervious areas of the ground or discharges via sheet flow to the Willamette River. Stormwater runoff from the roofs of the three storage silos flows directly to the Willamette River by sheet flow. The City of Portland Bureau of Environmental Services, which is the

[9] Ash Grove sent a notification letter to the City of Portland Department of Environmental Services to notify the Department regarding the sheet flow minimization practice. This letter is included with the SWPCP and is provided in Appendix 13i.

agency that works cooperatively with ODEQ to oversee stormwater management practices at the Terminal facility, has approved this management strategy during an on-site inspection (see Appendix 13i).

FIGURE 13-1. DRAWING OF NORTH TERMINAL STORMWATER DRAINAGE SYSTEM

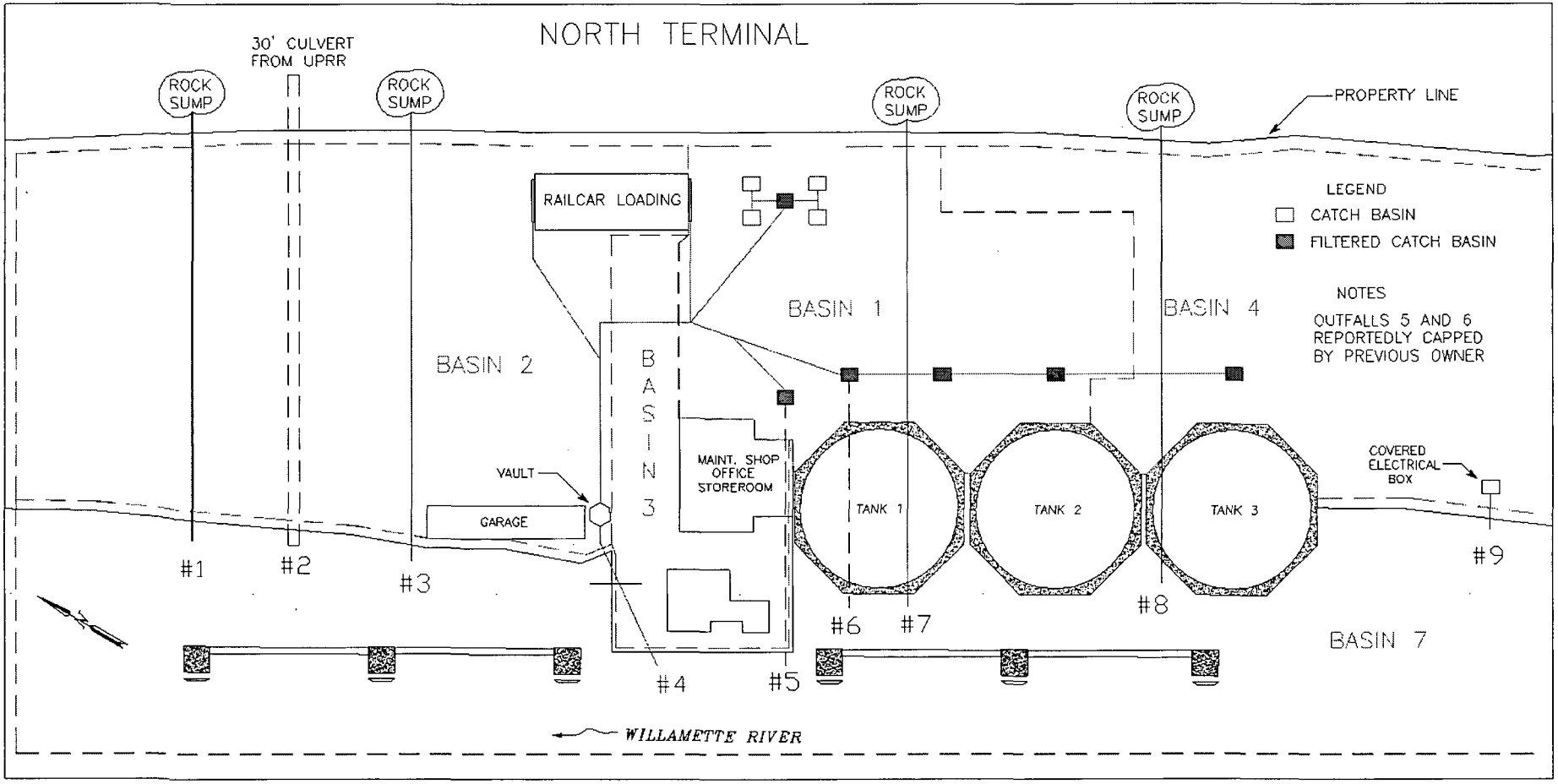
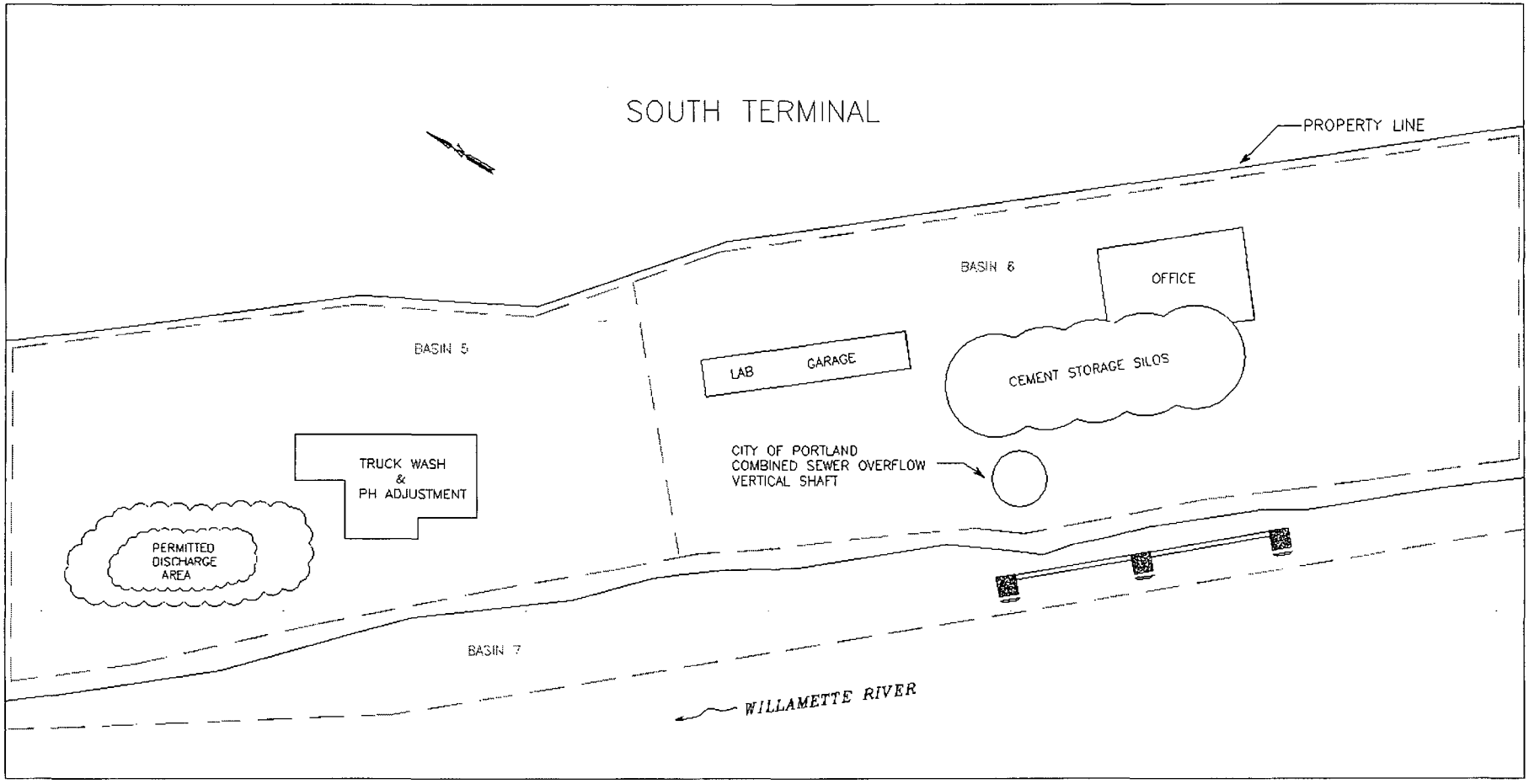


FIGURE 13-2. DRAWING OF SOUTH TERMINAL STORMWATER DRAINAGE SYSTEM



The SWPCP provided in Appendix 19 also describes the housekeeping and preventative maintenance procedures implemented by Ash Grove to maintain the stormwater systems.

A drawing in Appendix 13i shows the approximate locations of six stormwater outfalls that traverse Ash Grove's terminal property, labeled as Outfalls 1, 2, 3, 4, 7, and 8.[10] Of these outfalls, only Outfall 4 is under the control of Ash Grove. Outfalls 1, 3, 7, and 8 are connected to rock sumps which are not located on Ash Grove's property.[11] The termination points of Outfalls 1, 3, 7, and 8 consist of fan collectors filled with rock. A drawing indicates that the outfalls and off-site rock sumps had been in place prior to the start of Ash Grove's operations at the site.[12] Records indicate that the prior owner of North Terminal, CGAC, added drains 10, 11, 12, and 13 in November 2000 to catch runoff from a newly asphalted area. The electrical junction box at the Terminal facility remains covered in order to prevent stormwater from entering the box; however, drain 9 is available to drain stormwater from the electrical box, if any stormwater were to accumulate in it. Outfalls 5 and 6 are not currently in use, because, according to CGAC records, these outfalls were apparently capped and plugged at the bank of the river in November 2000, before Ash Grove's acquisition of the property.

Ash Grove understands that Outfall 2 originates on UPRR's property and discharges stormwater from the adjacent UPRR property to the Willamette River. No stormwater from the Ash Grove site enters this line. Historically, Ash Grove has not exercised control over the operation or maintenance of Outfall 2. Rather, UPRR maintains an easement on the line and controls its operation and maintenance.[13]

Several stormwater drains exist at the North Terminal facility, which are used to route stormwater through a pipe network and vault before discharging the stormwater from Outfall 4 to the Willamette River. The main stormwater drains are equipped with drain filters. The stormwater drain filters, used to collect and remove solids from the stormwater prior to discharge to the Willamette River, have been replaced on July 7, 2008. This is the one time the drain filters have been replaced since Ash Grove began operation of the North Terminal facility in April 2007.[14] Ash Grove's preventative maintenance plan includes periodic inspections every six months to ensure proper operation of the stormwater drain filters. The location of each of the main stormwater drains is depicted in Appendix 13i.

The sanitary sewer systems for the North and South Terminals remain separate. Sewer lines at the South Terminal are directed to a holding tank. The holding tank is pumped monthly by companies that have included Schulz, Enviromac, Enviroclear, and River

[10] Outfall 4 at Terminal is permitted under a General NPDES Stormwater Permit, Permit Number 1200-Z.

[11] Although rock sumps may be included in the definition 'dry wells', no rock sumps are located on Ash Grove's property. Therefore, rock sumps are not included in the response to Question No. 13f.

[12] Operations at the site began prior to Ash Grove's control of the North Terminal and South Terminal property.

[13] UPRR's easement may be found in the Multnomah County Easement Record (book 68, pages 362-367; June 9, 1984).

[14] This activity occurred after May 16, 2008, the cutoff date for this response, but Ash Grove felt it significant and therefore included it in this response.

City Environmental. Each month, approximately 1,500 gallons of water are pumped from the holding tank at the South Terminal for shipment off-site. The holding tank is inspected annually by the City of Portland Office of Planning and Development Review. Sewer lines at the North Terminal are directed to UPRR's septic system. Ash Grove has no control or knowledge regarding the maintenance of UPRR's septic system. Neither the North nor the South Terminal sewer systems discharge to the Willamette River.

j. Provide the following information about each Property identified in response to Question 4: Subsurface disposal fields, UIC wells, and other underground structures (e.g., underground storage tanks); and where they are located, if they are still used, and how they were closed.

Rivergate Facility: Over the course of operations at the Rivergate Facility, various underground structures were used. The underground structures identified by the records review conducted in response to EPA's 104(e) information request consist of three underground storage tanks, three groundwater monitoring wells, a septic tank, and a water well. Information regarding the septic tank is included in the response to Questions No. 13i.

- Two original underground storage tanks were constructed of steel and connected to galvanized steel piping during the initial facility construction in the 1963 to 1964 timeframe. According to a notification filed with EPA in 1986, each tank had a capacity of roughly 550 gallons and each was used for the storage of gasoline. A diagram showing the location of these underground storage tanks is included in Appendix 13j.
    - Both storage tanks were permanently decommissioned in December 1989, as specified by a notification submitted to ODEQ. This notification indicates that the tanks were decommissioned, removed and transferred as scrap steel to Schnitzer Steel located in Portland, Oregon.
- After the two original underground storage tanks were removed, a new 550 gallon underground storage tank was installed in early 1990. This new tank has been and is currently used to store unleaded gasoline. The gasoline is used to fuel on-site equipment as well as company vehicles. According to a notification submitted to ODEQ in June 2006, modifications were made to add an anode to the suction line in the manway and an overfill prevention valve was added to the drop tube.
- The groundwater well located at the Rivergate facility is described in the response to Question No. 13h.
- Beginning on December 21, 1992, PBS Environmental installed three groundwater monitoring wells near the three above ground fuel oil tanks at the Rivergate facility.[15] These wells were drilled and constructed in December 1992 by Pacific Northwest Drilling Company of Eugene, Oregon. These wells have

[15] The three above ground fuel oil tanks include two tanks that were used to store used oil, and one tank used to store diesel fuel. The diesel storage tank is currently in use, but no material has been added or removed from the two used oil storage tanks since decommissioning of the kilns in May 2006.

been used to periodically test water quality at the site since their installation. Results of groundwater testing can be found in the response to Question No. 65.

The locations of the current underground storage tank and the groundwater monitoring wells are identified on the corresponding site diagrams included in Appendix 13j. There is an underground belt transfer conveyance system at Rivergate used to move limestone and other raw materials to various parts of the facility. The system includes a main conveyor with branches leading to destinations. It is maintained regularly under Ash Grove's maintenance program. The site diagrams provided in Appendix 13l depict the location of this conveyance system.

Other underground pipelines and utilities are also located at Ash Grove's Rivergate facility, and are described in subparts b and c of Question No. 13

North Terminal: On December 29, 2005, Ash Grove completed its purchase of the former CGAC facility property, which is adjacent to Ash Grove's South Terminal. CGAC filed a registration for an underground injection control (UIC) system on October 3, 2005. After the purchase, Ash Grove conducted a review of the sumps listed in CGAC's UIC registration. It should be noted that these rock sumps are not located on the North Terminal property, but rather are located on the adjacent UPRR property. Ash Grove determined that these sumps did not qualify as UICs and that the UIC registration by CGAC had been filed in error. On May 1, 2006, Ash Grove requested that the UIC registration be withdrawn. Although no formal response to this request was received, the structures are no longer included in the SWPCP.

Other underground pipelines and utilities are also located at the North Terminal and are described in subparts b and c of Question No. 13. Drawings showing the locations of these various underground systems are included in the response to Question No. 13b and 13c.

South Terminal: There are no subsurface disposal fields or UIC wells at the South Terminal. Underground structures at the South Terminal consist of a concrete basement that includes a cement distribution system, which is part of the enclosed conveyance system that transfers materials from the rail reclaim area to the storage area. Additionally, the South Terminal includes an underground hydraulic pump located in the concrete basement for the rail indexer system.

Other underground pipelines and utilities are also located at the South Terminal. Information regarding these structures is provided under subparts b and c of Question No. 13. Drawings showing the locations of these various underground structures are included in Appendix 13b. Furthermore, as described in the response to Question No. 13i, there is a City of Portland CSO under the South Terminal property, over which Ash Grove does not and has not exercised any control.

k. Any and all major additions, demolitions or changes on, under or about the Property, its physical structures or to the property itself (e.g., stormwater drainage, evacuation work); and any planned additions, demolitions or other changes to the Property;

Question No. 13k requests information related to "any and all" major changes at the Property; however, the term "major" with respect to a change at a facility is not defined in EPA's 104(e) request. Therefore, Ash Grove, relying on its best professional judgment, has made the following assumptions to prepare this response:

- Major changes are assumed to include those modifications that require a notice of construction permit application to be submitted to ODEQ (these applications are submitted in response to Question No. 52), are listed in annual reports submitted under an Air Contaminant Discharge Permit (these annual reports are submitted in response to Question No. 58), or require the creation of construction blue prints (which are submitted in response to Question No. 13l).
- Major changes are assumed to not include minor modifications or upgrades, minor equipment replacements, equipment maintenance, and other changes that do not significantly affect plant operations or the facility's potential environmental impact.

Rivergate Facility: Chronological changes in the Rivergate facility's operations are listed in Table 13-3. Operational changes at Rivergate are included for the time period from Ash Grove's purchase of the undeveloped site by warranty deed dated April 2, 1963 (recorded April 3, 1963) to the present.

Terminal Facility: Changes in the Terminal facility's operations are presented in Table 13-4. Operational changes at the South Terminal are included for the time period from Ash Grove's purchase of the site by special warranty deed dated December 22, 1992 (recorded December 29, 1992) to the present. Operational changes at the North Terminal are included for the time period from Ash Grove's purchase of the site by special warranty deed dated December 22, 2005 (recorded December 29, 2005) to the present.

TABLE 13-3. MAJOR CHANGES AT THE RIVERGATE FACILITY

Year	Change at the Facility
1963	• Purchased facility as undeveloped land
1963 - 1964	• Constructed majority of original facility including: two calcimatic kilns, unloading dock, packaged hydrate mill, conveyor system, hydrate bulk bin loading, truck and track scale, material storage bins with dust collectors, fuel storage area, electric substation, sanitary sewer system including septic tank, office, maintenance building and change house, lab and control building, parking lots, single 4,000 gallon steel above ground storage tank, two 550 gallon underground storage tanks
1969	• Installed fuel oil standby system and a 425,000 gallon steel above ground storage tank • Installed a 50-ton hydrate bin and associated conveying system
1972	• Installed pebble storage loading platform

TABLE 13-3. MAJOR CHANGES AT THE RIVERGATE FACILITY (CONT'D)

Year	Change at the Facility
1973	• Installed a dust collecting loading spout under storage bin 1
1974	• Installed bulk hydrate loading platform • Installed quicklime dust control system
1977	• Installed Kiln 3
1985	• Installed Ag-Lime grinding system • Installed truck loadout system, including loadout bins and conveyors • Installed a 25,000 gallon steel above ground storage tank
1987	• Changed feed system on the three Ag Mills • Raised silos due to uneven settlement • Continued ongoing painting program • Obtained wash down truck and sweeper
1988	• Installed a palletizer for hydrate bags • Installed dolphins along the Willamette River • Continued ongoing painting program • Started receiving shipments of off-specification used oil for fuel
1989	• Added screens to two Ag Mills • Obtained an aquatic land lease from the State of Oregon Division of State Lands • Permanently decommissioned two 550 gallon underground gasoline storage tanks
1990	• Added a second loadout for limestone flour products, including material handling equipment, a loading spout, and a truck scale • Installed a "Big Bag" loading system in the warehouse, including material diverting equipment, a silo, and a programmable loading spout with scales • Installed a 12 ton/hr crusher to produce 1/8" minus material for use in the hydrator or other markets • Added a roof to the area on the South side of the shop • Installed one 550 gallon gasoline underground storage tank
1991	• Installed two dust collecting loading spouts in the pebble quicklime loading system • Installed natural gas by-pass
1992	• Modified lunch room into a new lab • Modified storeroom into a lunch room and store room • Installed settling basin in the kiln area • Installation of Oregon Steel Mill (OSM)/Ash Grove natural gas transmission line to connect to Northwest Pipeline on Sauvie Island • Installed three monitoring wells near the above ground fuel oil tanks • Installed above ground storage tank containment
1993	• Rebuilt hearth on Kiln 1 • Installed final screen for removing fine particles for OSM loads • Installed reclaim screen for Ag Mill feed • Added new instruments and controllers on kilns 1 and 2 • Installed new oil storage building • Remodeled conference room • Installed iron worker for maintenance department • Installed roof over oil unloading station • Expanded oil pump house to use larger separators to remove particles from used oil

TABLE 13-3. MAJOR CHANGES AT THE RIVERGATE FACILITY (CONT'D)

Year	Change at the Facility
1994	• Expanded warehouse • Installed metal hydrate storage building • Replaced gas-fired burners with combination gas and oil burners
1995	• Modified Kiln 1 preheater and rock chutes • Installation of two Quick-Lime storage bins and associated conveyor system • Installed of 500-ton lime storage bin #8
1996	• Completed a pneumatic conveyor from kiln dust tank to Ag Mills • Added dust collectors to quicklime screws
1997	• Installed fourth roller mill system (Ag Mill #4) • Installed ductwork to allow recycling of cooler gases for kiln 1 and 2 • Replaced cyclone with new ductwork and baghouse dust collectors at Kiln 1 and 2 quicklime discharge hoods
1998	• Added Landfill gas as the primary fuel for the kilns • Eliminated bypass stacks on Kilns 1 and 2
1999	• Added 2,500 ton lime storage silo
2000	• Added Landfill gas as a supplemental fuel source for Ag Mill #4 • Installed hydrate loadout pulse jet baghouse and associated ductwork • Cancelled state waterway lease[16] • Installed a sewer pipeline to connect to the city sewer system
2001	• Replaced Kritzer hydrator with Cimprogetti hydrator • Upgraded material conveyance system and mechanical air separator to handle additional hydrator throughput • Replaced existing hammer-mill with 50-inch roller mill • Replaced hydrator wet scrubber with a pulse jet baghouse • Installed a new dust collection system for the hydrate load out • Landfill gas piping added to Mills 1, 2, and 3
2002	• Installed new dust collection system in the raw material storage department • Installed two new load out spouts and dust collectors in the agricultural grinding department
2003	• Installed a 500-ton storage silo, equipped with a pulse jet baghouse
2004	• Replaced Kiln 3 plenum pulse baghouse with a pulse jet baghouse • Upgraded Hydrate/Warehouse dust collection system, including the installation of two new pulse jet baghouses and associated ductwork
2005	• Tank cleaning and disposal
2006	• Operations in the kiln department were suspended • Transferred control of hydration operations to Graymont Western US, Inc. • Stormwater treatment system upgrade
2007	• Installation of a truck scale, bucket elevator, and drag chain (railcar unloader) conveyor in the quicklime storage department

[16] The state waterway lease covered a boathouse which housed a company boat during the winter. The lease was cancelled when the boathouse was removed.

TABLE 13-4. MAJOR CHANGES AT THE TERMINAL FACILITY

Year	Changes at the Facility
1992 - 1993	• Purchased the South Terminal from UPRR • Constructed most aspects of original facility including: six cement storage silos, two truck loadout stations, barge mooring including dock and dolphins, a two story control building, railway extension, access roads, stormwater collection, paving and roadwork
1997	• Maintenance building addition • Installed a maintenance storage shed • Shoreline stabilization project
2000	• Installed water pump and gear assembly
2005-2007	• Purchased the North terminal from CGAC • Obtained an aquatic land lease from the State of Oregon Division of State Lands • Upgraded pneumatic ship unloading system • Began installation of an enclosed pipe conveyor system used to transfer cement between the North and South Terminals • Modified existing rail tracks to integrate North and South Terminals • Modified unloading, reclaim, and loadout system at the North terminal to allow for cement unloading • Stormwater treatment system upgrade

l. All maps and drawings of the Property in your Possession;

In preparing a response to Question No. 13l, Ash Grove relied upon the guidance provided in EPA's April 8, 2008 response to suggestions for the 104(e) information request (specifically, the response to Question No. 13l, labeled as Question No. 12l in EPA's response). In the response to Question No. 13l, Ms. Lori Houck-Cora states that:

> *It is reasonable to interpret the question to request maps or drawings of the Property that show differences over time of physical or constructed attributes of the Property, such as but not limited to, the property boundaries, roads, solid waste management units, landfills, utility easements or other major physical changes to the property or buildings. This question is not asking for copies of all drawings of individual buildings or blueprints.*

Ash Grove used its best professional judgment to select those drawings that show differences over time of physical or constructed attributes of the Properties. Ash Grove inherited a number of documents from its predecessor, CGAC; however, Ash Grove makes no representation that the collection of maps it received is comprehensive nor that it has identified the maps/drawings in its possession that depict differences in the physical or constructed attributes at the property before Ash Grove purchased it. In general, Ash Grove selected those drawings that illustrate the overall scope of each modification. Neither detailed blueprints of buildings, equipment, and structures nor preliminary drawings and drafts are provided, but will be provided upon request.

Rivergate Facility: Maps and drawings of the Rivergate facility are found in Appendix 13l.

Terminal Facility: Maps and drawings of the Terminal facility are found in Appendix 13l.

m. All aerial photographs of the Property in your possession.

Rivergate Facility: Aerial photographs of the Rivergate facility identified by the records review process are provided in Appendix 13m.

Terminal Facility: Aerial photographs of the Terminal facility identified by the records review process are provided in Appendix 13m.

14. For Properties adjacent to the Willamette River, provide specific information describing the river-ward boundary of private ownership and where state aquatic lands and/or state-management jurisdiction begins. Provide a map that delineates the river-ward boundary of each Property.

Question No. 14 requests a map delineating the river-ward boundary of each Property. In EPA's April 8, 2008 response to suggestions for the 104(e) information request (specifically, the response to Question No. 14, labeled as Question No. 13 in EPA's response), Ms. Lori Houck-Cora states that:

> *For Respondents with river-front property, Respondents need to provide the information they possess or their management or employees know regarding the river-ward boundary of their property. Using their knowledge and information, Respondents should provide a map delineating where their privately-owned land stops and state-managed land begins. Respondents do not have to seek documents they don't have from DSL.*

Included in Appendix 14 are maps that identify property boundaries of the Rivergate and Terminal facilities to the best of Ash Grove's knowledge. Legal descriptions of properties and leased land are included in the response to Question No. 4.

15. For each Property, provide all reports, information or data you have related to soil, water (ground and surface), or air quality and geology/hydrogeology at and about each Property. Provide copies of all documents containing such data and information, including both past and current aerial photographs as well as documents containing analysis or interpretation of such data.

We understand EPA's request in Question No. 15 to ask only for reports, information, and data that specifically relate to the environment [i.e., soil, water (ground or surface), air quality, geology/hydrogeology] at and about Ash Grove's properties. That is, this question does not refer to information about Ash Grove's emissions, discharges, operations, or materials, which are addressed by other questions in EPA's information request.

Reports, information, and other data related to soil, water (ground and surface), or air quality and geology/hydrogeology at the Rivergate facility during Ash Grove's operation are listed in Table 15-1. Documentation related to these media at the Terminal facility during Ash Grove's operation is listed in Table 15-2. Ash Grove purchased the undeveloped Rivergate facility site by warranty deed dated April 2, 1963 (recorded April 3, 1963). Ash Grove purchased South Terminal from UPRR by a special warranty deed dated December 22, 1992 (recorded December 29, 1992). Ash Grove purchased North Terminal from NSC Smelter LLC (which Ash Grove understands was an affiliate of CGAC) by statutory special warranty deed dated December 22, 2005 (recorded December 29, 2005). Documentation inherited from prior owners of the Terminal facility is listed in Table 15-3. Copies of this documentation are included in Appendix 15, but as noted in Assumption number 1, Ash Grove does not represent that the documents submitted include all studies, reports or information created about each Property before Ash Grove acquired them. Furthermore, Ash Grove specifically makes no representation with regard to the completeness or accuracy of prior owners' documentation.

TABLE 15-1. DOCUMENTS RELATED TO ENVIRONMENTAL MEDIA AT RIVERGATE

Name and/or Description of Document	Environmental Media
Preliminary Foundation Investigation, Proposed Lime and Cement Plant, Rivergate Area, Portland, Oregon for the Ash Grove Lime and Portland Cement Company [17]	Soil
Supplemental Foundation Investigation, Proposed Lime and Cement Plant, Rivergate Area, Portland, Oregon for the Ash Grove Lime and Portland Cement Company [18]	Soil
Water Sample – Ash Grove Lime & Portland Cement Company Well	Water
Supplemental Foundation Investigation and Settlement Studies, Lime Bins and Bulk Storage Tunnel, Rivergate Area, Portland, Oregon for Ash Grove Lime and Portland Cement Company [19]	Soil
Water Bacteriological Examination	Water
PEMCO Client Report Information	Soil
JOB #2421 Ash Grove Cement Permissible Exposure Limits (PEL) #90-0178	Soil
Procedures and Results of Soil Sampling Documented by PEMCO Upon Removal of a 550-Gallon Gasoline Tank	Soil
Sounding Map	Geology
Sounding Map	Geology

[17] Although the proposal identifies the Rivergate facility as a lime and cement plant, the Rivergate facility has only operated as a lime plant. Also, as noted in the response to Question No. 74 (c), from 1937 to 1968 Ash Grove operated under the name Ash Grove Lime & Portland Cement Company.

[18] Ibid.

[19] Ibid.

TABLE 15-1. DOCUMENTS RELATED TO ENVIRONMENTAL MEDIA AT RIVERGATE (CONT'D)

Name and/or Description of Document	Environmental Media
Ash Grove Cement Plant, Portland, Oregon Monitoring Well Installation and Monitoring PBS Project No. 5065.00	Water
Ash Grove Cement Plant, Portland, Oregon Groundwater Monitoring – Fuel Oil Tank Farm Follow-Up Monitoring PBS Project No. 5065.10	Water
Sounding Map	Geology
Geotechnical Investigation, Proposed Mill Expansion, Ash Grove Lime and Portland Cement Company	Geology
Report of Findings, Groundwater Monitoring – May 1998, Ash Grove Cement Lime Plant, PBS Project #12730.00	Water
Microbiological and Chemical Analysis of Well Water	Water
Monthly Environmental Report	Water
Microbiological and Chemical Analysis of Well Water	Water
Nitrate Analysis of Well Water	Water
Laboratory Sample Analysis	Water
Monitoring Well and Geo-technical Hole Reports	Geology
Source Water Assessment Report	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Proposal for Sediment Characterization at Ash Grove Cement Company's Rivergate Lime Plant	Soil

TABLE 15-1. DOCUMENTS RELATED TO ENVIRONMENTAL MEDIA AT RIVERGATE (CONT'D)

Name and/or Description of Document	Environmental Media
Lab Faucet Water Analysis	Water
Notes on Dredged Sediment	Soil & Geology
Lab Faucet Water Analysis	Water
Sampling and Analysis Plan	Soil
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Sediment Data Report	Soil & Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
General Questionnaire Received from an ODEQ Site Assessment Specialist	Water
Proposal to Test Groundwater Monitoring Wells	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Groundwater Monitoring Report	Water
Groundwater Monitoring Report	Water
Plan View of Proposed Dredging and Sample Locations	Hydrogeology
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water
Lab Faucet Water Analysis	Water

TABLE 15-2. DOCUMENTS RELATED TO ENVIRONMENTAL MEDIA AT TERMINAL

Name and/or Description of Document	Environmental Media
Hydraulic Oil Clean-up Status Report	Soil
Hydrographic Survey Drawings of River Site	Hydrogeology

TABLE 15-2. DOCUMENTS RELATED TO ENVIRONMENTAL MEDIA AT TERMINAL (CONT'D)

Name and/or Description of Document	Environmental Media
Photos and Memos Regarding Investigation of Source of Oil Sheen On River	Water
Sampling and Analysis Plan	Soil & Water
Army Corp of Engineers Response to Sampling and Analysis Plan	Soil & Water
PBS Dredge Sediment Analytical Report	Soil & Water
PBS Dredging Project Proposal	Hydrogeology
PBS Memorandum – November 12, 2007	Hydrogeology
PBS November Invoice	Hydrogeology
Email Correspondence with State about Dredging	Hydrogeology
PBS Memorandum Regarding Dredging Project	Soil
PBS Memorandum Regarding Dredging Project Invoice	Soil

TABLE 15-3. DOCUMENTS RELATED TO ENVIRONMENTAL MEDIA INHERITED FROM PRIOR OWNERS OF THE TERMINAL FACILITY

Name and/or Description of Document	Environmental Media
Material Removal Permit and Results from Facility Pitch Survey	Geology
Phase II Site Assessment of UPRR Albina Railyard Property, Portland, Oregon Including Soil Sample Analysis Results	Soil & Water
Summary of Phase I ESA and Environmental Compliance Review for Columbia Aluminum Facilities	Soil & Water
Sediment Sampling Results; Goldendale Aluminum Co., Multnomah County, OR; Corps Permit Application ID No. 97114	Soil
Sediment Sampling Results; Goldendale Aluminum Co., Multnomah County, OR; Corps Permit Application ID No. 97114	Soil
Request for Performance of Preliminary Assessment with Sampling – Goldendale Aluminum Site and ODEQ Site Assessment Program – Strategy Recommendation	Soil & Hydrogeology
Goldendale Aluminum Company Dredge Sample Screening – DRAFT	Soil
Sampling and Analysis Work Plan	Soil
Draft Analytical Results	Soil
Sampling and Analysis Work Plan for the Planned Dredging Activities at Goldendale Alumina Unloading Facility	Soil

TABLE 15-3. DOCUMENTS RELATED TO ENVIRONMENTAL MEDIA INHERITED FROM PRIOR OWNERS OF THE TERMINAL FACILITY (CONT.)

Name and/or Description of Document	Environmental Media
Hydrographic Survey of the Goldendale Aluminum Co. Dock Facility Located on the Willamette River	Hydrogeology
Updated Preliminary Assessment and Dredging Sampling Results – Goldendale Alumina Unloading Facility	Soil
Response to ODEQ's Comments on the 2001 Preliminary Assessment	Soil
ODEQ Strategy Recommendation Update Goldendale Alumina Unloading Facility and Sediment Test Results	Soil
Various Documents Regarding Preliminary Site Assessment	Soil
Request for, Strategy Recommendation for, and Comments on Preliminary Site Assessment	Soil
TPH and BTEX/N Results from the Groundwater Sampling at the Portland Facility	Water
Groundwater Assessment Report Goldendale Alumina Unloading Facility, Portland, Oregon	Water
Analytical Results from Soil Samples Collected During 1989 Storage Tank Removal	Soil
Hydrographic Survey Drawings of River Site	Hydrogeology

16. Identify all past and present solid waste management units or areas where materials are or were in the past managed, treated, or disposed (e.g., waste piles, landfills, surface impoundments, waste lagoons, waste ponds or pits, tanks, container storage areas, etc.) on each Property. For each such unit or area, provide the following information:

- **a. a map showing the unit/area's boundaries and the location of all known units/areas whether currently in operation or not. This map should be drawn to scale, if possible, and clearly indicate the location and size of all past and present units/areas;**
- **b. dated aerial photograph of the site showing each unit/area;**
- **c. the type of unit/area (e.g., storage area, landfill, waste pile, etc.), and the dimensions of the unit/area;**
- **d. the dates that the unit/area was in use;**
- **e. the purpose and past usage (e.g., storage, spill containment, etc.);**
- **f. the quantity and types of materials (hazardous substances and any other chemicals) located in each unit/area; and**
- **g. the construction (materials, composition), volume, size, dates of cleaning, and condition of each unit/area**

Rivergate: Solid waste management units and areas where materials are or were stored at the Rivergate facility are described below. An image showing the location of material storage areas can be found in Appendix 16.

- **Above Ground Storage Tanks**: Three above ground storage tanks are located in the tank farm at the Rivergate facility. The tank farm is equipped with a secondary containment system consisting of a concrete pad surrounded by 5-feet high reinforced concrete walls designed to hold more than 425,000 gallons of liquid. The secondary containment system is intended to contain the entire volume of liquid from the largest storage tank, in case a major leak should occur.

    - The 425,000 gallon steel tank was used to store oil brought on-site to fire the kilns from the time period beginning in 1969, when the tank was installed, and ending in May 2006, when the kilns were permanently decommissioned. The tank was cleaned in 2005 as described in the response to Question No. 17 and is currently idle. The tank is vertically oriented and rests on a flat base. In a tank inspection conducted in May 2005, the tank floors were determined to be in good condition. According to Ash Grove personnel, ultrasonic thickness testing was also conducted, which showed the tank to be in good condition. There are no additional cleaning dates apart from the cleaning event in 2005.

    - The 25,000 gallon steel tank was installed in 1978. Based on interviews with facility personnel, from 1978 to 1986, the tank was in diesel service and was used to fuel mobile equipment. According to personnel, standard operating procedure during this time frame required that the tank be drained periodically to remove water and sediment, to avoid the contamination of the mobile equipment. Current Ash Grove personnel are not aware of the frequency or volume of these maintenance activities. From 1986 until May 2006, when the kilns were permanently decommissioned, the tank was used to store oil brought on-site to fire the kilns. The tank was cleaned in 2005 as described in the response to Question No. 17 and is currently idle. The tank is vertically oriented and rests on a flat base. In a tank inspection conducted in May 2005, the tank floors were determined to be in good condition. According to Ash Grove personnel, ultrasonic thickness testing was also conducted, which showed the tank to be in good condition. There are no additional cleaning dates apart from the cleaning event in 2005.

    - The 4,000 gallon steel diesel tank is used to fuel the facility's mobile equipment, such as front-end loaders used for the off-loading of limestone from barges. Equipment fueling is accomplished using a 15 gallon per minute pump located at the oil truck unloading station. This tank was installed during initial plant construction, in 1964 as a propane tank. The tank was converted to a diesel tank in 1986, and is still in use as a diesel tank. The tank is horizontally oriented and is mounted on saddles. According to Ash Grove personnel, ultrasonic thickness testing was conducted, which showed the tank to be in good condition. To the best of Ash Grove's information and belief, this tank has not been cleaned during its operation.

- **Underground Storage Tanks**: One single wall, fiberglass, 550-gallon underground gasoline storage tank is located at the Rivergate facility. This tank is used to store fuel for gasoline-powered mobile equipment. Prior to the installation of the current tank in 1990, two 550-gallon underground storage tanks were used to store fuel for mobile equipment. These tanks were removed in 1990. Additional information related to the removal of these tanks is included in the response to Question No. 17. The current tank is in good condition, as an ODEQ UST Operations and Maintenance (O&M) Compliance Inspection was successfully completed for the tank in June 2007. These inspections are conducted as mandated by ODEQ. Ash Grove is not aware of any cleaning on the two tanks which previously existed at the facility or the single tank which currently exists at the facility.

Container Storage Areas: At Rivergate, 55-gallon drums and other small containers for waste oil, lubricating oil, and other materials used for maintenance and fueling are located throughout the facility. These locations are depicted in the map included in Appendix 16. A listing of storage containers is included in Table 16-1. According to Ash Grove personnel, these areas are kept clean and organized.

TABLE 16-1. STORAGE CONTAINERS AT THE RIVERGATE FACILITY

ID	Location	Condition	Volume of Storage Container (gallons)
Spent Solvent	#7 Storage Area	Good condition - Replaced when full.	55
Spent Antifreeze	#7 Storage Area	Good condition - Replaced when full.	55
Used Oil Filters	#7 Storage Area	Good condition - Replaced when full.	55
Used Absorbent Pads	#7 Storage Area	Good condition - Replaced when full.	55
Used Absorbent Pads	#7 Storage Area	Good condition - Replaced when full.	55
Solvent Container	Maint. Shop Oil Storage	Good condition - Replaced when full.	60
Hydraulic Oil Container	Maint. Shop Oil Storage	Good condition - Replaced when full.	32
Lube Oil Drum	Maint. Shop Oil Storage	Good condition - Replaced when full.	55
Lube Oil Drum	Maint. Shop Oil Storage	Good condition - Replaced when full.	55
Lube Oil Drum	Maint. Shop Oil Storage	Good condition - Replaced when full.	55
Grease Drum	Maint. Shop Oil Storage	Good condition - Replaced when full.	55
Hydraulic Oil Drum	Maint. Shop Oil Storage	Good condition - Replaced when full.	55
Waste Oil Drum	Maint. Shop Oil Storage	Good condition	55
Antifreeze Drum	Area 8 Lube Room	Good condition - Replaced when full.	55
Solvent Drum	Area 8 Lube Room	Good condition - Replaced when full.	55

TABLE 16-1. STORAGE CONTAINERS AT THE RIVERGATE FACILITY (CONT'D)

ID	Location	Condition	Volume of Storage Container (gallons)
Trans. Fluid Drum	Area 8 Lube Room	Good condition - Replaced when full.	55
Lube Oil Drum	Area 8 Lube Room	Good condition - Replaced when full.	55
Hydraulic Oil Drum	Area 8 Lube Room	Good condition - Replaced when full.	55
Lube Oil Drum	Area 8 Lube Room	Good condition - Replaced when full.	55
Lube Oil Drum	Area 8 Lube Room	Good condition - Replaced when full.	55
Portable Diesel Container	Near No. 1 MCC	In good condition w/secondary containment.	100

- **Transformers**: The storage capacities of the transformer tanks located at the Rivergate facility are listed in Table 16-2. The locations of these transformers are depicted on the map included in Appendix 16. To the best of Ash Grove's information and belief, these tanks have not been cleaned since their installation in 1988. Ash Grove hires a third-party contractor to inspect and maintain the transformers.

TABLE 16-2. TRANSFORMERS AT THE RIVERGATE FACILITY

ID	Location	Condition	Volume (gallons)
Transformer Coolant Oil Tank	South of Store Room	Good condition, no problems documented or mentioned by electrical contractor	375
Transformer Coolant Oil Tank	South of Store Room	Good condition, no problems documented or mentioned by electrical contractor	375
Transformer Coolant Oil Tank	South of Store Room	Good condition, no problems documented or mentioned by electrical contractor	375
Transformer Coolant Oil Tank	West of Ag Mill	Good condition, no problems documented or mentioned by electrical contractor	403
Transformer Coolant Oil Tank	West of Ag Mill	Good condition, no problems documented or mentioned by electrical contractor	156

- **Septic system**: A septic tank was used to handle sewage and wastewater at the Rivergate facility from the beginning of operation in 1964 until approximately 2002, when the facility was connected to the city water system. According to Ash Grove personnel, the septic system consisted of a concrete tank with a plastic infiltration pipe. Ash Grove personnel believe the concrete tank is approximately 15 feet deep and 8 feet wide by 8 feet wide. The septic system is described in detail in the response to Question No. 13b. The shutdown of the septic system is described in the response to Question No. 17. During operation of the system, the flow rate directed to the system was approximately 2,100 cubic feet per month, based on facility sewage bills received prior to the shutdown of the kilns.

- **Stockpiles**: Various raw materials, intermediate materials, and products are stored in stockpiles at the Rivergate facility. Stockpiles have been used at the facility from the beginning of operations in 1964 to the present. Appendix 13m includes aerial photographs of the stockpiles, which are used to calculate the volume of each. Based on a review of the reports associated with the stockpile volume assessments and interviews with Ash Grove personnel, on average, between seven and nine stockpiles have existed at the Rivergate facility at any one time. On average, stockpiles contain approximately 8,000 cubic yards of material.

- **Settling Basins**: Several settling basins are located at the Rivergate facility. Currently, the solids removed from the settling basins are dried and used in processes at the facility.

    - **Kiln Settling Basins:** Concrete kiln settling basins were used at the facility from the start of operation in 1964 until the kilns were permanently decommissioned in May 2006. To the best of Ash Grove's information and belief, two settling basins were installed during initial plant construction around the start of operation in 1964. According to Ash Grove personnel, a third basin was installed around 1973. The settling basins were scheduled to be removed when the kiln area is demolished in the summer of 2008.

      The three basins were located on the west side of the kiln department. According to Ash Grove personnel, two basins were 10 feet wide by 10 feet long. One basin was 10 feet wide by 30 feet long. The three basins were built on a slope to assist with cleaning, such that the depth of the basins sloped from zero to five feet. When in use, the basins were cleaned often, as much as once per week, with the use of a loader.

      During operation of the kilns, the basins received non-contact cooling water from the kiln process area at a flow rate of approximately 20 gallons per minute. From the start of operation until approximately 1973, the lime kiln cooling water was directed from settling basins, through a drainage ditch and additional settling basins, to Outfall 001. From approximately 1973 until the kilns were permanently decommissioned in May 2006, lime kiln cooling water was primarily used for irrigation on the plant property. Beginning in 1999, the kiln settling basins were pumped to the proposed rock wash settling basins prior to direction to the field for irrigation. From 1973 to 2006, cooling water could be directed to Outfall 001 if necessary. However, according to Ash Grove personnel, the infrequent releases

through the outfall have been in connection with heavy rain events and have occurred two to three times over the past fifteen years.

- **Hydrator Settling Basin**: An earthen hydrator settling basin was used at the facility from the start of operation in 1964 until approximately 2001. This basin is no longer present at the facility. When in use, the settling basin received water used to clean the old hydrator. In 2001, the hydrator was replaced with a new hydrator that did not require as much water and, as a result, the hydrator settling basin was no longer needed.

  The hydrator settling basin was located at the facility to the north of Bin 8. According to Ash Grove personnel, the basin was approximately 12 feet wide by 25 feet long. The basin was built on a slope to assist with cleaning, such that the depth of the basin sloped from zero to five feet. A record produced by an engineering firm in 1963, during the initial construction of the facility, indicated that a mixture of approximately 500 lbs of lime and approximately 1,000 to 2,000 gallons of water would be directed to the settling basin as a result of annual hydrator cleaning activities.

- **Riverfront Settling Basins:** Earthen settling basins have been used at the facility to varying degrees from the time plant operation began in 1964 until the present. Historically, the basins served to settle solids out of water that was discharged through Outfall 001. The number of basins has varied over the operation of the Rivergate facility. The main use of the basins was to receive non-contact cooling and other process waters from the kilns prior to such discharge, but this use stopped by 1973. Currently, there are two basins and they may discharge stormwater in the event of a severe storm.

  Records indicate that during early plant operation, eight settling basins were present at the Rivergate facility. The following information was obtained from a record dated October 1973:

  - Two primary settling basins (in series) were used to remove solids from both the kiln non-contact cooling water and the kiln water seal water prior to its permitted discharge. Each basin was 9 feet wide, 40 feet long, and 5 feet deep. Ash Grove is not aware of the specific time at which the use of these basins stopped.

  - Limestone was washed at a triple-deck screen located at the southwest corner of the Property. Four primary settling basins (in series) were used to remove solids from the resulting rock wash water prior to its permitted discharge. Each basin was 9 feet wide, 33 feet long, and 5 feet deep. These basins no longer exist at the facility. The use of these basins began at the time the plant began operation in 1964. Ash Grove is not aware of the specific time at which the use of these basins stopped, although the practice of limestone

washing was discontinued sometime between October 1973 and January 1974. The use of these basins was stopped at that time.

- Two secondary settling basins received the total flow from the six primary settling basins described above. These secondary settling basins were each 9 feet wide, 45 feet long, and 5 feet deep. The use of these basins began at the time the plant began operation in 1964. To the best of Ash Grove's information and belief, these two basins still exist at the facility (as described above).

- **Truck Wash Settling Basins**: Two concrete settling basins are located near the truck wash on the north side of the property. These basins receive the water generated in the truck wash. According to Ash Grove personnel, the basin was approximately 15 feet wide by 25 feet long. The basin was built on a slope to assist with cleaning, such that the depth of the basin sloped from zero to 5 feet.

- **Tunnel Settling Basin**: A concrete settling basin is located on the east side of the north conveyor tunnel. The basin receives water which accumulates in the tunnel. Water that seeps into the tunnel is pumped out of the tunnel and into the basin via a fixed metal pipe. The water pump into the basin is typically mostly free of sediment. According to Ash Grove personnel, the basin is approximately 6 feet wide by 6 feet long by 3 feet deep.

- **Surface Washing Settling Basin**: This concrete settling basin was constructed in 1992. This basin is intended to receive water used for washing surfaces at the facility. However, this basin is rarely used, according to Ash Grove personnel. The basin is approximately 20 feet wide by 35 feet long. The basin was built on a slope to assist with cleaning, such that the depth of the basin sloped from zero to 5 feet.

- **Proposed Rock Wash Settling Basins**: Three interconnected concrete settling basins were constructed in 1999 to the west of the kiln area. The basins were built with the intention that they would receive water from a planned rock washing area. The rock washing area, however, was not constructed. From 1999 until the kilns were permanently decommissioned in May 2006, the kiln settling basins were pumped to the proposed rock wash settling basins prior to direction to the field for irrigation. These settling basins currently receive stormwater as well as water discharged from the plant air compressors. The compressors discharge water a flow rate of 17,000 gallons per day. The water accumulated in these settling basins is used for irrigation. The three basins are each 15 feet wide by 80 feet long. The basin was built on a slope to assist with cleaning, such that the depth of the basin sloped from zero to 12 feet.

- **Willamette River**: Records indicate that during early plant operations, two process streams were discharged to the Willamette River. It should be noted that, during this time, Ash Grove was authorized to dispose of process residues in the Willamette River. According to internal correspondence dated April 19, 1966, Ash Grove received verbal approval for this disposal

method from the "state river pollution people" in the spring of 1965 (see Appendix 16). Ash Grove was permitted to discharge industrial wastes, including lime kiln cooling water, rock washing water, and dust collector disposal water, under Oregon State Sanitary Authority temporary permit no. TP-203 dated December 13, 1967 and Oregon State Sanitary Authority permit no. 233 dated July 26, 1968. On July 16, 1973, ODEQ Waste Discharge permit no. 1514 became effective for Ash Grove's Rivergate facility.[20] The regular discharge of the two streams stopped sometime between 1973 and 1974. The two discharge streams are discussed in detail below.

- During early plant operation, unsaleable products were discharged to the Willamette River. Limestone dust, quicklime dust, spilled hydrate that could not be reclaimed, and over or under burned lime, was mixed with water and discharged through settling basins to the river in a slurry form. According to an application for an Oregon State Sanitary Authority waste discharge permit dated December 1967[21], the flow rate of this discharge stream was 1,500 gallons per day. Around 1973, markets were identified for these materials and, instead of being disposed, they were sold after this time. In addition, limestone wash water was discharged to the river. Limestone was washed at a triple-deck screen located at the southwest corner of the Property. Wash water from limestone washing operations was discharged at a flow rate of 4,500 gallons per hour at a frequency of 32 hours per week according to a record from 1971. Sometime between October 1973 and January 1974, limestone washing was discontinued at the facility.

- Kiln non-contact cooling water was discharged to the river at a rate of 15,000 gallons per day, according to an application for an Oregon State Sanitary Authority waste discharge permit dated December 1967. According to Ash Grove personnel, regular discharges of the lime kiln cooling water to the Willamette River stopped at the end of 1973. At this time, the lime kiln cooling water was directed to the field for irrigation purposes. Prior to the decommissioning of the kilns in May 2006, the cooling water could be directed to the Willamette River if necessary under NPDES Waste Discharge Permit No. 102465. According to Ash Grove personnel at the Rivergate facility, prior to the decommissioning of the kilns in May 2006, the infrequent releases through the outfall have been in connection with heavy rain events and have occurred two to three times over the past fifteen years. The ditch and outfall have not been used since the decommissioning of the kilns in May 2006, but NPDES Waste Discharge Permit No. 102465 remains in effect.

- **Compost Pile**: During recent plant history, small amounts of landscaping wastes were hauled to a compost pile located in the southwest corner of the plant. This practice is no longer in place at the facility. Currently, landscaping debris is placed directly into a company truck and hauled off-site.

[20] The three permits referenced are provided in Appendix 52.
[21] This application is provided in Appendix 52.

- **Oil cleanup materials**: Oily rags are stored in a 20-gallon drum located on the southwest side of the maintenance shop. Absorbent materials used to collect oil are discarded into 55-gallon drums with lids located west of the bermed area of the oil storage tanks.

- **Wood**: Currently, discarded wood is placed in a Waste Management Inc. drop box and taken to a sorting facility where it is recycled. The drop box is located along the fence line, just east of the calcining department. Prior to the decommissioning of the kilns in May 2006, records indicate that in the past, reusable wood and waste wood are stored separately, as described below.

    - Prior to May 2006, wood that was reusable was stored just south of kiln #3.

    - Prior to May 2006 unusable wood was stored along the north fence just north of the warehouse and disposed off-site. This area is now located within the portion of the facility under of the control of Graymont and is no longer used by Ash Grove. Graymont began leasing the structures and equipment associated with hydration operations from Ash Grove on June 1, 2006, after the kilns were permanently decommissioned in May 2006.

- **Dumpsters**: Food and office wastes are stored in a dumpster located south of the lunchroom/shower house. Steel and metal scraps are stored in a dumpster located south of the lunchroom/shower house. Stainless steel scraps are stored in a dumpster located east of the maintenance shop.

- **Tire Storage Area**: During Ash Grove's operation of the Rivergate facility, used tires have been stockpiled near the southeast corner of the kilns prior to off-site disposal.

- **Used Light Bulb Storage Area**: Used light bulbs are stored in the fully enclosed attic above the electrical office/storeroom. This building is located west of the kiln department along the south property line near the three kiln settling basins. Used light bulbs are accumulated in this area for recycling/disposal.[22]

- **Covered Battery Storage Area**: Batteries are stored on a 4 ft by 4 ft pallet on a concrete surface under a covered metal roof. The storage area is located along the south wall of the maintenance shop building. Batteries accumulated in this area are recycled/disposed when necessary. The area is kept clean and organized.

- **Material storage bins**: Products are stored in bins prior to off-site truck shipment. Table 16-3 provides information about each material storage bin at the Rivergate facility.

[22] Used light bulbs are collected periodically (every several years) by a vendor. The vendor chooses whether to recycle or dispose of the used light bulbs.

TABLE 16-3. MATERIAL STORAGE BINS AT THE RIVERGATE FACILITY

Bin Number	Material Stored	Capacity (ton)	Bin Composition	Installation Date	Dates of Cleaning (if applicable)	Condition
Bin 1 - 6	lime	300	Concrete and steel	1963	NA	Good Condition
Bin 7	lime	450	Steel	1963	NA	Demolished in 2008
Bin 8	lime	600	Steel	1995	NA	Good Condition
Bin 9	lime	500	Steel	2003	NA	Good Condition
Steel Silo	Hydrate	50	Steel	1973	NA	Good Condition, under the control of Graymont since June 1, 2006
Concrete Silo	Hydrate	200	Concrete	1973	NA	Good Condition, under the control of Graymont since June 1, 2006
Tank 1	Crushed Limestone	700	Steel	1986	NA	Good Condition
Tank 2	Crushed Limestone	1500	Steel	1986	NA	Good Condition
Tank 3	Crushed Limestone	1500	Steel	1986	NA	Good Condition

Terminal: To the best of Ash Grove's information and belief, the solid waste management units and areas where materials are or were stored at the Terminal facility during Ash Grove's ownership of the property are described below. A facility diagram showing the location of the material storage areas can be found in Appendix 16. Aerial photographs of the Terminal facility in Ash Grove's possession that were identified during the records review process are included in Appendix 13m.

- **500-Gallon Diesel Tank:** A 500-gallon double-walled steel above ground diesel storage tank is located at the North Terminal on the north side of the garage. This tank serves to fuel motorized equipment on-site. The tank and dispenser are encompassed by concrete-filled

steel pipe bollards, which serve to protect the tank from contact with vehicles or equipment. The tank is also equipped with a tertiary containment system to accommodate the containment of fuel delivery trucks. Mobile equipment at the Terminal facility is fueled using a 15 gallon per minute pump located within the secondary containment area. This tank has been in use from the time that Ash Grove acquired the North Terminal property on December 22, 2005 (recorded December 29, 2005) to the present. The tank has not been cleaned since Ash Grove acquired the property, is visually inspected monthly and the tank remains in good condition.

- **125-Gallon Propane Tank:** A 125-gallon propane tank, which stores fuel for on-site mobile equipment, is located next to the 500-gallon diesel tank on the north side of the garage at the North Terminal. This tank was originally installed in 1996 at the South Terminal on the west side of the silos, but was moved to its current location in 2007. The tank is visually inspected monthly, is in good condition, and cleaning has not been required or conducted during Ash Grove's ownership of the Terminal facility.

- **Compressed Gas Cylinders:** Several cylinders of compressed gas are used for facility maintenance activities. Gases currently on-site include four 250-cubic foot cylinders of oxygen, three 125 cubic foot cylinders of argon, and three 125-cubic foot cylinders of acetylene. These gases have been used at the Terminal facility since 1996. Currently, the gases are stored on the north side of the North Terminal garage in the vicinity of the propane and diesel storage tanks. Before acquisition of the North Terminal, the cylinders were stored outside the South Terminal shop near the unload area in a secured wall support frame. The cylinders are replaced as necessary when emptied.

- **Material Storage in the Seven-Bay Garage**: The seven-bay garage contains petroleum products used for the operation and maintenance of on-site equipment at the Terminal facility. The garage is approximately 88 feet by 20.5 feet. Material storage containers within the seven-bay garage include several 55-gallon steel drums of motor oil and hydraulic oil, a steel 300-gallon used oil storage tank, and smaller containers of various other petroleum products. Additional petroleum products stored in the garage include new and used lubricants, greases, antifreeze, and solvents.

  The 300-gallon used oil tank is equipped with a steel secondary containment structure, and is located within the bermed tertiary containment area. The tank itself is visually inspected monthly, is in good condition and has not been cleaned since Ash Grove acquired the property. The 55-gallon drums are stored within a secondary containment berm. Automotive transmission fluid, antifreeze, gear compound, motor oil, hydraulic oil and lubricants are stored in vendor containers in Bay 6. The storage area in the garage has been in use from the time that Ash Grove acquired the North Terminal property on December 22, 2005 (recorded December 29, 2005) to the present.

A small quantity of used light bulbs is generated by the Terminal facility. These used light bulbs are stored in cardboard boxes in the seven-bay garage. They are accumulated with the Rivergate facility's used light bulbs, and are recycled/disposed of every several years.[23]

- **Vault**: A concrete vault is used for stormwater collection and solids removal at the facility. At the North Terminal facility, stormwater drains to a pipe network and is directed to the vault where solids settle out of the water. The vault is constructed of concrete and is 5 feet long, 5 feet wide, and 6 feet deep. A minimum amount (approximately one foot) of water remains in the vault following a storm event. From the vault, stormwater is directed to the Willamette River through Outfall 4.[24] This stormwater management system became operational under Ash Grove in early 2007, around the time the first ship was unloaded at the North Terminal. The vault is regularly inspected, is in good condition, and was cleaned in the summer of 2006 by River City Environmental.
- **Hydraulic Railcar Indexers**: Hydraulic railcar indexers are hydraulically operated power units used to move railcars.
    - **South Terminal**: The South Terminal hydraulic railcar indexer has been in use since the South Terminal began operation in December 1994. The railcar indexer includes a 150-gallon steel hydraulic oil reservoir located in the basement of the South Terminal. The exterior of the tank was cleaned in February 2008. The indexer and the tank are both in good condition.
    - **North Terminal**: Two hydraulic railcar indexers are located just south of the railcar loading area at the North Terminal. Each indexer has a steel hydraulic oil reservoir with a capacity of 220 gallons. The indexers are composed of steel, are in good condition, and are surrounded by a secondary asphalt containment berm. These indexers have not been cleaned during Ash Grove's ownership of the property. The indexers have been located at the North Terminal from the time that Ash Grove acquired the North Terminal property on December 22, 2005 (recorded December 29, 2005) to the present.
- **Electrical Transformer**: The electrical transformer is located within a containment structure just east of the administrative building at the North Terminal. The transformer, which contains mineral oil, has an oil capacity of approximately 490 gallons. The equipment is surrounded by a concrete secondary containment berm. Tests conducted annually from 1998 to 2001 by the prior owner of the North Terminal indicate that the transformer oil contains 0 parts per million (ppm) polychlorinated biphenyls (PCBs). The transformer has been located at the North Terminal from the time that Ash Grove acquired the property on December 22, 2005 (recorded December 29, 2005) to the present. The equipment is in good condition, is visually inspected monthly, and cleaning has not been required during Ash Grove's operation.

[23] Used light bulbs are collected periodically (every several years) by a vendor. The vendor chooses whether to recycle of dispose of the used light bulbs.

[24] Outfall 4 is permitted under General NPDES Stormwater Permit Number 1200-Z.

- **Garden Shed**: The dimensions of the garden shed are 10 feet by 16 feet. Small quantities of gasoline are stored in a containment cabinet in the garden shed located north of the seven-bay garage. Containers stored in this location each have storage capacities of no greater than 5 gallons.

- **Small Battery Storage Bucket**: Small batteries are accumulated in a five gallon bucket located in the administrative building. The batteries will be recycled/disposed off-site when the bucket is filled. Large equipment batteries are exchanged with the vendor.

- **Silos**:

    - **South Terminal Silos**: Concrete silos are used at the South Terminal to store cement. The six concrete storage silos located at the South Terminal have been in use since Ash Grove commenced operations at the South Terminal in December 1994 and currently remain in use. There are three 127,660 cubic foot silos and three 13,830 cubic foot silos. One of the silos was cleaned in June 2006 as part of an inspection to assess the bottom of the aeration system. The silos remain in good condition and, other than the June 2006 cleaning, no other cleaning has occurred during Ash Grove's operation of the South Terminal property.

    - **North Terminal Silos**: There are three steel storage silos, each with a capacity of approximately 449,801 cubic feet, for cement storage at the North Terminal.[25] The three silos at the North Terminal have been used to store cement since the first ship arrived at the North Terminal in April 2007 and currently remain in use. The silos are constructed of steel and are in good condition. The three silos at the North Terminal were renovated during the facility upgrade following acquisition of the North Terminal on December 22, 2005 (deed recorded December 29, 2005). As part of renovation, the silos were cleaned of previous stored products. Other than this event, these silos not have been cleaned during Ash Grove's ownership of the property. Ash Grove's records do not indicate the final disposal location of this material. Ash Grove is investigating the disposal location of this material with the relevant contractor, and will supplement this response as appropriate if and when additional information is located.

- **Holding Tank**: A 1,500-gallon holding tank is used at the South Terminal to store sewage generated by the South Terminal facility. This tank is in good condition and is annually inspected by the City of Portland. The holding tank has been in use since Ash Grove began operation of the South Terminal in December 1994, and currently remains in use. According to a review of pumping invoices, the tank is typically emptied monthly and, during each pumping event, approximately 1,000 to 1,500 gallons of material is removed by companies including Schulz Sanitation, Enviromac, and River City Disposal and Recycling. Additional information related to the removal of septic waste from the holding tank at the South Terminal is provided in the response to Question No. 40.

[25] Through an agreement with CGAC, the silos at the North Terminal may also be used to store alumina for a specified period of time from the date ownership was transferred to Ash Grove. During Ash Grove's operation of the facility, however, alumina has not been stored in the North Terminal silos.

- **South Terminal Lab and Warehouse Building**: The South Terminal lab and warehouse building, which has total dimensions of 16 feet by 95 feet, was constructed in 2007 and currently remains in use. The lab portion of the building is approximately 16 feet by 40 feet and is used for the testing and quality assurance of cement. Within the lab, there is one 300-gallon tub used to cure the test concrete cylinders. Other materials stored and used at the lab include cement additives (approximately 20 gallons of additives are kept on-site), vinegar, and small quantities of hydrated lime. Product residue generated by laboratory testing is accumulated at the concrete storage bunker at the south end of the facility. Additional information related to the disposal of this material can be found in the response to Question No. 40.

- **South Terminal Lab Aggregate Storage Area:** Attached to the South Terminal lab building is a concrete bunker used for storing aggregate materials, which include rock and sand, used as raw materials in concrete production. This bunker is approximately 26 feet by 13.5 feet and is divided into two sections, one for coarse aggregate storage and the other for fine aggregate storage. Small quantities of both types of aggregate are brought to the facility once a year (approximately four cubic yards of each are brought on-site annually). The aggregate is used to create cement mixtures in the lab.

- **South Terminal Lab Wash Water Poly Tank**: Wash water used in the South Terminal lab is collected in a sump. This water contains sand, gravel, and small amounts of concrete, cement powder, and concrete additives. Approximately 200 to 300 gallons of wash water is generated per month. Wash water is currently collected in a 125 gallon poly tank mounted on a rolling cart. When the poly tank fills, the wash water is taken to the South Terminal truck wash system for pH adjustment.

  Prior to October 2008, the water was collected in a sump and was discharged to a gravel area located on the east side of the lab building, near the railroad tracks. This area is located in drainage basin 6. Stormwater from this basin does not flow to the river via sheetflow. At this location, the wash water infiltrated the ground.

- **South Terminal Truck Wash:** The truck wash has been in use since Ash Grove began operation of the South Terminal in December 1994 to the present. The truck wash system includes three material storage areas, each of which are described below:

  - **Truck Wash Concrete Settling Basin**: This basin is constructed of concrete and measures 41 feet by 16 feet with a depth of 4 feet or less. The water from the truck wash enters this basin after passing through a system designed to remove larger sediment. The basin allows for any remaining sediment to settle out before the water is pumped into the truck wash tank. The basin has been in use from December 1994 to the present and is in good condition. The basin has been cleaned multiple times to remove sediment build-up. Additional information related to the disposal of this sediment is provided in the response to Question No. 40.

  - **Truck Wash Tank**: One 1,500-gallon polyethylene surge tank is used for holding wash water. Water enters this tank after the majority of sediment has been allowed to

settle. This tank has been in use from 2001 to the present. The tank is in good condition, and cleaning has not been required during Ash Grove's operation.

- **Truck Wash Permitted Discharge System:** Water from the truck wash at the South Terminal is directed from the concrete settling basin into a tank and then to the permitted discharge area.[26] The permitted discharge location area is approximately 95 feet by 40 feet with a depth of 6 feet which allows for water pumped from the truck wash tank to infiltrate the ground. It is an earthen structure and is not cleaned other than the removal of heavy vegetation. This location has been in use from December 1994 to the present.

- **South Terminal Concrete Storage Bunkers**: The concrete storage bunker at South Terminal is constructed of concrete blocks and has dimensions of 42 feet by 17 feet. This storage bunker, which has been in use from 2007 to the present, is used for storing cement product residue and wastes produced by the South Terminal lab. This residue is removed as necessary depending on the amount of residue that builds up over any given time period. Additional information regarding disposal can be found in the response to Question No. 40. The quantity stored is highly dependent on the occurrence of any incidents that result in unusable product. This storage area is in good condition and cleaning has not been required during Ash Grove's operation.

- **South Terminal Waste Bins**: Two steel waste bins are located at South Terminal along the river side of the road well to the south of the silos. These bins are provided by Waste Management. These waste bins store general trash generated by the facility prior to the trash being picked up for disposal. . One bin is a one cubic yard recycled cardboard bin and the other is a two cubic yard general trash bin. The bins are located in an earthen area just off of the roadway to provide easy access to the vendor. The waste bins are in good condition and cleaning has not been required during Ash Grove's operation. When the bins become damaged or worn, the vendor replaces them.

17. If the unit/area described above is no longer in use, how was such unit/area closed and what actions were taken to prevent or address potential or actual release of waste constituents from the unit/area.

Rivergate: Three of the units/areas identified in response to Question No. 16 are no longer in operation at the Rivergate facility. These units consist of two underground storage tanks, a septic tank, and above ground used oil storage tanks.

- **Septic Tank:** Rivergate operated a septic tank from 1964 until approximately 2002, when the facility was connected to the city sewer system. According to Ash Grove personnel at Rivergate, emptying or maintenance of the septic tank was not required. Solids self-deteriorated within the septic tank while water flowed out of the septic system to infiltrate the ground in the drain field. According to Ash Grove personnel, the septic tank was filled with sand upon closure and remains in place.

[26] The truck wash discharge point is permitted under a 1700-B General Water Pollution Control Facilities permit.

- **Underground Storage Tanks**: Both storage tanks were permanently decommissioned in December 1989, as specified by a notification submitted to ODEQ. This notification indicates that the tanks were decommissioned by PEMCO and transferred as scrap steel to Schnitzer Steel located in Portland, Oregon.

  PEMCO performed soil sampling following the removal of the tank. The sampling results received from PEMCO indicate that the contamination levels in the soil samples were in compliance with the applicable ODEQ standards. No further cleanup was required.

- **Above Ground Used Oil Storage Tanks:** The tanks were used for the storage of used oil until the kilns were decommissioned in May 2006 and since this time have remained idle.

  The above ground storage tanks were cleaned by Phillip Services Corporation (PSC) from May 31, 2005 to June 7, 2005. The invoice received from PSC Industrial indicates that 77,996 gallons of oily water were removed from the tanks and shipped to Cascade General. In addition, 11,066 gallons removed from the tanks was disposed of at the Wasco County Landfill, and 20 cubic yards of solids were disposed of at PSC's disposal facility in Kent, WA facility.

  A chemical analysis of the tank bottom solids was performed by Columbia Inspection Inc.

  At the time the tanks were cleaned, a review of steel tank floors and integrity testing was conducted by Corrosion Control Specialists. During the testing, no damage was detected and the thickness readings indicated that the tank floors were in good condition.

Terminal: The units and areas described in the response to Question No. 16 at the Terminal facility are currently in operation. No solid waste management units or areas have been closed or otherwise taken out of service during the time of Ash Grove's ownership of the Terminal facility.

18. For each property, provide the following information regarding any current or former sewer or storm sewer lines or combined sanitary/storm sewer lines, drains, ditches, or tributaries discharging into the Willamette River:

a. the location and nature of each sewer line, drain, ditch, or tributary.

Rivergate: No stormwater management system currently exists at the Rivergate facility, as stormwater infiltrates the ground naturally. Ash Grove's Rivergate facility has one outfall and one ditch that currently may discharge water to the Willamette River. During periods of unusually heavy rain, stormwater could potentially enter the ditch leading to Outfall 001. For this reason, the outfall at Rivergate is permitted under the NPDES Waste Discharge Permit No. 102465 (expires January 31st, 2010). For more information regarding the nature and historic use of the ditch and outfall, refer to the response to subpart (e) of Question No. 18. See Appendix 18 for images of the facility showing the location of the outfall and ditch as well as related documentation.

Ash Grove operated a septic tank at Rivergate from 1964 until approximately 2002, when the facility was connected to the city sewer system. This septic system did not discharge to the Willamette River.

Other than the outfall and ditch described above, to the best of Ash Grove's information and belief, there are no other sewer lines, drains, ditches or tributaries that discharged into the Willamette River from the Rivergate facility during Ash Grove's operation of the property from 1964 to the present.

Terminal: There are a total of eight outfalls at the Terminal facility. Of these outfalls, only Outfall 4 is under the control of Ash Grove. For more information regarding these outfalls, see the response to Question No. 13i. Additionally, for more information regarding the sanitary sewer systems for the North and South Terminals, see the response to Question No. 13i.

Appendix 18 includes images showing the locations of the outfalls, drains, and catch basin. To the best of Ash Grove's information and belief, there are no other sewer lines, drains, ditches or tributaries that discharged to the Willamette River from the Terminal facility during Ash Grove's operation of the property. Ash Grove operations began at the South Terminal in December 1994. Ash Grove operations began at the North Terminal in April 2007.

b. the date of construction of each sewer line, drain, ditch or tributary;

Rivergate: To the best of Ash Grove's information and belief, the outfall and drainage ditch have been in place since operations commenced at the site in 1964. The outfall and drainage ditch have not been in use since 1973, except for the occasional stormwater discharges during unusually heavy rain events described in part (a) of this response above. In addition, a limited portion of the drainage ditch was used after 1973 until the kilns were decommissioned in May 2006 on an infrequent basis to collect process related waters as described in part (e) of this response.

Terminal: A sketch indicates that the outfalls and rock sumps (which are not located on Ash Grove's property) were in place prior to the start of Ash Grove's operations at the site.[27] The sketch indicates that the prior owner of North Terminal, CGAC, added drains 10, 11, 12, and 13 to catch runoff from a newly asphalted area and capped Outfalls 5 and 6 in November 2000. A copy of this sketch is provided in Appendix 18.

c. whether each sewer line or drain was ever connected to a main trunk line;

Rivergate: At the Rivergate facility, the only line connected to a main truck line is the city sewer connection which was made in approximately 2002 as described in part (a) of this response above.

[27] Operations at the site began prior to Ash Grove's control of the North Terminal and South Terminal properties.

Terminal: At the Terminal facility, to the best of Ash Grove's information and belief, there are no and have not been any sewer lines or drains connected to a main trunk line. Rather, as described in the response to Question No. 13i, sewage from the South Terminal goes to a holding tank, while sewage from the North Terminal is routed to UPRR's septic system.

d. whether each sewer line, drain, ditch, or tributary drained any hazardous substance, waste, material or other process residue to the Willamette River; and

Ash Grove operates both facilities with proper environmental controls in place. Subject to Assumption No. 6 regarding cement and lime as placarded materials for transportation purposes, and except as otherwise described in these responses and the documents provided, to the best of Ash Grove's information and belief, Ash Grove is unaware of any releases of hazardous substances, wastes, materials or other process residues through sewer lines, drains, ditches, or tributaries.

Rivergate: Based on the historical records reviewed to prepare this response and to the best of Ash Grove's information and belief, non-contact cooling water, kiln water seal water, limestone wash water, and a mixture of water and limestone dust and quicklime dust have drained into the Willamette River as described in the response to Question No. 18e. There has not been a release of hazardous substances, wastes, materials, or other process residue other than the three streams described in part (e) of this response from Outfall 001 or the drainage ditch at the Rivergate facility. The outfall and drainage ditch have not been in use since 1973, other than the unusual heavy rain events described in the response to part (a) above. In addition, the initial portion of the drainage ditch has been used on an infrequent basis to collect process related waters as described in part (e) of this response.

Terminal: Based on the historical records reviewed to prepare this response and to the best of Ash Grove's information and belief, there has not been a release of hazardous substances, wastes, materials, or process residue other than the stormwater streams described in part (a) of this response from any outfalls controlled by Ash Grove at the Terminal facility.

Ash Grove has documentation of a single relevant discharge event from Outfall 2, which Ash Grove understands discharges stormwater from the UPRR facility. This discharge event was observed from October 17, 2006 to October 20, 2006. Ash Grove personnel worked with the Coast Guard, RMCAT Environmental Services, and UPRR to determine the cause of the discharge in a timely manner. UPRR confirmed that the discharge originated from its drain pipes. Further documentation related to this single release from UPRR's property can be found in Appendix 18.

e. provide any documentation regarding but not limited to the following on any and all outfalls to the Willamette River which are located within the boundaries of the Property(ies). Your response should include but not be limited to: (i) The area serviced by the outfalls; and (ii) the type of outfall (i.e. stormwater or single facility operational).

Rivergate: No stormwater management system currently exists at the Rivergate facility, as stormwater infiltrates the ground naturally. Ash Grove's Rivergate facility has one outfall and one ditch that may discharge water to the Willamette River. During periods of unusually heavy rain, stormwater could potentially enter the ditch leading to Outfall 001 and flow into the river although, according to Ash Grove personnel, such stormwater related discharges have occurred two to three times over the past fifteen years. For this reason, the outfall at Rivergate is permitted under the NPDES Waste Discharge Permit No. 102465 (expires January 31st, 2010). The following sections describe the current and historical use of this outfall and ditch. See Appendix 18 for images of the facility showing the location of the outfall and ditch as well as related documentation.

Outfall 001 and Drainage Ditch: (Non-contact kiln cooling water / Stormwater): Outfall 001 is the only outfall at Rivergate that historically was connected to the facility's kiln water circulation system through a drainage ditch that ran from the kiln settling basins to Outfall 001 (see Rivergate drawing in Appendix 16). Process related water flowed from the kiln area to kiln settling basins.[28] From the kiln settling basins, the process related water was directed to the ditch. Near the river, the ditch directed process related water into interconnected earthen settling basins.[29] The water was discharged to the river through a discharge pipe extending from the earthen settling basins directly to the river. Ash Grove personnel indicate that, upon entering the ditch, the process waters described in the next paragraph below typically reached Outfall 001 in two to three days.

According to Ash Grove personnel, prior to 1973, the outfall was primarily used for the discharge of non-contact cooling water from the calcining department (approximately 15,000 gallons per day). The outfall was also permitted for various additional process water discharges, such as limestone wash water and water containing residual product. Wash water from limestone washing operations was discharged at a flow rate of 4,500 gallons per hour at a frequency of 32 hours per week according to a record from 1971. Records indicate that the discharge of this stream was stopped sometime between October 1973 and January 1974. According to a record from 1967, a mixture of water, limestone dust and quicklime dust was discharged at a flow rate of 1,500 gallons per day, but records also indicate that the discharge of this stream was stopped in 1973, when a market was identified for these materials.

From 1973 until construction of the three "proposed rock wash basins" (see Rivergate drawing in Appendix 16) in 1999, these process related waters were discharged into three settling basins west of the kilns and pumped from those basins to irrigate the plant's grassed area on the southeast quadrant of the site. Upon

[28] To the best of Ash Grove's information and belief, two of the concrete kiln settling basins were installed during initial plant construction around the start of operation in 1964. According to Ash Grove personnel, a third concrete kiln settling basin was installed around 1973.

[29] Based on a review of historical records, up to eight earthen settling basins have existed near the river at the Rivergate facility. Currently, there are two settling basins near the river.

construction of the three "proposed rock wash basins" in 1999, these process related waters were pumped from the three settling basins west of the kiln to the three proposed rock wash basins and then pumped from there to the grassed area for irrigation purposes.

For clarification, it should be noted that (a) the kilns were decommissioned in May 2006 dramatically reducing the volumes of such process related waters and (b) the three settling basins west of the kiln area were removed in 2008 so that the three proposed rock wash basins remain for collection of irrigation waters.

Although the vast majority of the process related waters passed through the settling basins to the irrigation system from 1973 until the decommissioning of the kilns in May 2006, such water was infrequently directed from the kiln settling basins to the ditch during this time period. These infrequent discharges to the ditch occurred during malfunctions of the irrigation system pump or during periods of exceptionally high discharge. During the infrequent discharges to the ditch, the ditch was blocked off at a point located over 500 feet away from the discharge point at the Willamette River.

Terminal: Eight outfalls to the Willamette River traverse Ash Grove's Terminal facility. Of these outfalls, only Outfall 4 is under the control of Ash Grove. Appendix 18 includes images showing the location of the outfalls as well as related documentation. The following is a description of each outfall based on a survey completed by Maul Foster & Alongi, Inc. for Ash Grove in April 2006.

Outfall 1 (Stormwater): A 12-inch Corrugated Metal Pipe (CMP) runs northeast from Outfall 1 and crosses the property. This pipe terminates just outside of the property line approximately 18 inches below ground at a fanned metal collector filled with angular rocks. Based on interviews with Ash Grove personnel, this rock sump was unearthed and filled with slurry (i.e., plugged) under the direction of the prior owner.

Outfall 2 (Stormwater): A 30-inch CMP storm drain runs northeast from Outfall 2 and continues northeast, off the property. This outfall discharges stormwater from the adjacent UPRR property. No stormwater from Ash Grove enters the line at any point. UPRR maintains an easement on this line, the location of which can be found in the Multnomah County Easement Record included in Appendix 18.

Outfall 3 (Stormwater): A 12-inch CMP runs northeast from Outfall 3 and across the property. During the survey the signal was lost outside of the property line. It is assumed that this outfall discharges water from a rock sump located on UPRR property. Based on interviews with Ash Grove personnel, this rock sump was unearthed and filled with slurry (i.e., plugged) under the direction of the prior owner.

Outfall 4 (Stormwater): Based on historical drawings, this outfall discharges stormwater from the site into the Willamette River. There are no indications of a UIC in association with this outfall.

Outfall 5 (Stormwater): Based on a sketch produced by a prior owner, this outfall was capped and plugged in November 2000 by a prior owner.

Outfall 6 (Stormwater): Based on a sketch produced by a prior owner, this outfall was capped and plugged in November 2000 by a prior owner.

Outfall 7 (Stormwater): An 8-inch CMP runs east from Outfall 7 along the north silo to the edge of the concrete pad and then turns in a northeasterly direction. This pipe terminates outside of the property line.

Outfall 8 (Stormwater): A CMP runs northeast from Outfall 8, under the south silo, and across the Ash Grove property. During the survey, the signal was lost three feet outside of the fence line and outside of the property line. It is assumed that this outfall discharges water from a rock sump located on UPRR property.

19. Provide copies of any stormwater or property drainage studies, including data from sampling, conducted at these Properties on stormwater, sheet flow, or surface water runoff. Also provide copies of any Stormwater Pollution Prevention, Maintenance Plans, or Spill Plans developed for different operations during the Respondent's operation of each Property.

Table 19-1 identifies documentation related to stormwater and property drainage studies, and sampling conducted at Rivergate related to stormwater, sheet flow, or surface water runoff. Table 19-3 identifies this documentation as it relates to Ash Grove's operation of the Terminal facility.

Table 19-2 identifies any stormwater pollution prevention, maintenance plans, and spill plans developed during Ash Grove's operations of the Rivergate facility. Table 19-4 identifies this documentation as it relates to Ash Grove's operation of the Terminal facility.

Copies of each of these documents are included in Appendix 19.

TABLE 19-1. RIVERGATE STUDIES AND SAMPLING DATA THAT RELATE TO STORMWATER, SHEET FLOW, OR SURFACE WATER RUNOFF

Date	Document Title	Description
December 5, 1994	Monitoring data per NPDES Permit No. 100865	River test result (pH, turbidity, suspended solids) for examination of water and wastewater.
2001 - 2008	NPDES Discharge Monitoring Report	Monitoring report confirmed that no discharges occurred from December 1, 2001 to April 1, 2008.

TABLE 19-2. RIVERGATE STORMWATER POLLUTION PREVENTION PLANS, MAINTENANCE PLANS, OR SPILL PLANS

Date	Document Title	Description
April 5, 1975	Spill Prevention Control and Countermeasure (SPCC) Plan	Oil pollution prevention plan to prevent or minimize oil spills.
May 16, 2005	Updated SPCC Plan	Revised Spill Prevention Control and Countermeasure Plan for the Rivergate plant.

TABLE 19-3. TERMINAL STUDIES AND SAMPLING DATA THAT RELATES TO STORMWATER, SHEET FLOW, OR SURFACE WATER RUNOFF

Date	Document Title	Description
1/2006 - 10/2006	Hazmat Monthly Inspections	Hazmat inspections were conducted each month. The inspections focus on hazmat storage locations, but also include inspections of the stormwater outfalls. No issues at outfalls were observed during the inspections
2/2006 - 12/2006	Visual Monitoring Log for NPDES Permit	Stormwater discharge visual monitoring for oil/grease sheens, color, and floating solids
April 24, 2006	Off-site Rock Sump Evaluation	Stormwater drainage study conducted by Maul Foster and Alongi Inc.
6/2006 - 12/2006	SPCC Monitoring Log	Monthly monitoring of containment areas and debris, sediment, and controls at facility downspouts, trench drains, and catch basins
August 21, 2006	Stormwater System Design Update	Update on the stormwater treatment system upgrade design from Maul Foster and Alongi Inc.

TABLE 19-3. TERMINAL STUDIES AND SAMPLING DATA THAT RELATES TO STORMWATER, SHEET FLOW, OR SURFACE WATER RUNOFF (CONT'D)

Date	Document Title	Description
1/2007 - 6/2007	Visual Monitoring Log for NPDES Permit	Stormwater discharge visual monitoring for oil/grease sheens, color, and floating particles
1/2007 - 12/2007	SPCC Monitoring Log	Monthly monitoring of containment areas and debris, sediment, and controls at facility downspouts, trench drains, and catch basins
June 6, 2007	Landscaping and mitigation plans for reconstruction of stormwater outfalls	Plans for Union Pacific Railroad outfall project involving the reconstruction of two stormwater outfalls that traverse the Ash Grove property at the Willamette River. Historically, Ash Grove has not exercised control over the operation or maintenance of these stormwater outfalls; however, UPRR and its contractors needed access to the Ash Grove property to let the prospective bidders see the work area. Landscaping and mitigation plans included tree planting.
November 29, 2007	1200Z Stormwater Certificate of Analysis	Results of 1200Z stormwater outfall testing for total oil and grease, pH, total suspended solids, and metals.
1/2008 - 4/2008	SPCC Monitoring Log	Monthly monitoring of containment areas and debris, sediment, and controls at facility downspouts, trench drains, and catch basins
7/2007 - 6/2008	Industrial Stormwater Discharge Monitoring Report	Stormwater analytical results and visual monitoring data
1/2008 - 3/2008	Visual Monitoring Log for NPDES Permit	Stormwater discharge visual monitoring for oil/grease sheens, color, and floating particles

TABLE 19-4. TERMINAL STORMWATER POLLUTION PREVENTION PLANS, MAINTENANCE PLANS, OR SPILL PLANS

Date	Document Title	Description
January 2006	SWPCP	The SWPCP originally covered the previous owner of the North Terminal (CGAC). Ash Grove adopted this SWPCP until developing a comprehensive plan covering the North and South Terminals.
May 4, 2006	SWPCP	Stormwater Pollution Control Plan for Terminal
June 27, 2006	SPCC	Spill Prevention Control and Countermeasure Plan for Terminal

20. Describe the nature of your operations or business activities at each Property. If the operation or business activity changed over time, please identify each separate operation or activity, the dates when each operation or activity started and, if applicable, ceased.

Question No. 20 requests a description of the nature of "operations or business activities" at each Property. The term "business activities" is defined in Definition 2 of EPA's 104(e) request as "all actions, endeavors, ventures, or financing arrangements related in any manner whatsoever to the use and development of the Property, including surveying, sampling, grading, documentation, photography, demolition, construction, and waste disposal, and sales." In developing a response to this Question, Ash Grove focused on operational areas at each facility. Detailed descriptions of major changes at the two facilities are presented in the response to Question No. 13k and can be found in Table 13-3 and Table 13-4 for Rivergate and Terminal, respectively.

Rivergate Facility: The facility is a lime manufacturing plant. Since the start of its operations in 1963, operations at the Rivergate facility have included ship unloading, material handling and sizing, calcimatic kilns to produce chemical lime, hydrating lime to produce calcium hydroxide, as well as roller mills and dryers to produce agricultural lime.

Table 20-1 lists each operation and the time period it took place at the Rivergate facility. Since the Rivergate facility has used several fuel sources for the kilns during the course of its operations, kiln fuel sources are listed separately in Table 20-2. Fuel types used by the Ag Mills are characterized in Table 20-3. Operational changes at Rivergate are included for the time period from Ash Grove's commencement of operations at the site in 1964 to the present.

TABLE 20-1. OPERATIONS AT THE RIVERGATE FACILITY

Operation	Year Operation Began	Year Operation Ceased
Hydrator (4 ton/hr)	1964	2001
Kiln operation (Kilns 1 and 2)	1964	2006
Barge unloading	1964	Ongoing
Material handling and sizing	1964	Ongoing
Truck and track loading	1964	Ongoing
Kiln operation (Kiln 3)	1977	2006
Ag Mill operation (Ag Mills 1, 2, and 3)	1985	Ongoing
Ag Mill operation (Ag Mill 4)	1997	Ongoing
Hydrator (12 ton/hr)	2001	Ongoing [a]

[a] Hydrator operations have been under the control of Graymont Western US, Inc. since June 1, 2006.

TABLE 20-2. FUEL SOURCES FOR THE KILNS AT THE RIVERGATE FACILITY

Fuel Type	Year Fuel Use Began	Year Fuel Use Ceased
Natural Gas	1964	2006
Propane	1964	1974
Fuel Oil[30]	1964	2006
Coal	1982	1990
Landfill Gas	1998	2006

TABLE 20-3. FUEL SOURCES FOR THE AG MILLS AT THE RIVERGATE FACILITY

Fuel Type	Year Fuel Use Began	Year Fuel Use Ceased
Natural Gas	1985	Ongoing
Landfill Gas	2000	Ongoing

Terminal Facility: The facility is a material distribution terminal, consisting of a South Terminal and a North Terminal. Operational changes at the South Terminal are included for the time period beginning with Ash Grove's purchase of the site by special warranty deed dated Dec. 22, 1992 (recorded Dec. 29, 1992) to the present. Operational changes at the North Terminal are included for the time period beginning with Ash Grove's purchase of the site by special warranty deed dated Dec. 22, 2005 (recorded Dec. 29, 2005) to the present. Table 20-3 lists each operation and the time period it took place at the North and South Terminals

TABLE 20-4. OPERATIONS AT THE TERMINAL FACILITY

Operation	Year Operation Began	Year Operation Ceased
South Terminal railcar unloading, cement material storage, and material loading into trucks.	1995	Ongoing
North Terminal ship unloading, material storage, and material loading into railcars.	2007	Ongoing

[30] Fuel oil includes off-spec used oil as of 1988.

21. At each Property, did you ever use, purchase, generate, store, treat, dispose, or otherwise handle any waste, or material? If the answer to the preceding questions is question is anything but an unqualified "no," identify:

- **a. in general terms, the nature and quantity of the waste or material so transported, used, purchased, generated, stored, treated, disposed, or otherwise handled;**
- **b. the chemical composition, characteristics, physical state (e.g., solid, liquid) of each waste or material so transported, used purchased, generated, stored, treated, transported, disposed, or otherwise handled;**
- **c. how each such waste or material was used, purchased, generated, stored, treated, transported, disposed, or otherwise handled by you; and**
- **d. the quantity of each such waste or material used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you**

In EPA's April 8, 2008 response to suggestions for the 104(e) information request (specifically, the response to Question No. 21, labeled as Question No. 20 in EPA's response), Ms. Lori Houck-Cora states that:

> *The question is seeking a general description of materials, not specifics or documentation. We are looking for relative amounts of materials handled and general estimates (approximately 5 gallons a year or 5 tons). For businesses, like railroads, trucking companies, or other entities whose business it is to transport or "handle" other businesses' products or materials, you should first determine whether the materials in fact were "handled" at the property in question that is within the Investigation Area versus some other location. Meaning if the property within the Investigation Area is only a refueling facility, and not a transloading or transfer facility, then the products/materials likely were not handled at the property. If the products were transferred or transloaded at the property within the Investigation Area, then the question is just seeking a list of the types of products and other materials that would have been transferred or transloaded at the property over time. Again, the question is not asking for bills of lading, receipts, etc. for each material discussed.*

The response to Question No. 21 provides a general description of materials that Ash Grove has used, purchased, generated, stored, treated, disposed, or otherwise handled on-site at either the Rivergate or Terminal facility, along with a general estimate of the quantity of each material used, purchased, generated, stored, treated, disposed, or otherwise handled.

For the responses to subparts (a) and (c), see Table 21-1 and Table 21-2 for the Rivergate facility and Terminal facility, respectively. The tables are organized into categories based on the nature of the materials. For Rivergate, material categories include raw materials, by-products and products, fuels, maintenance materials, laboratory materials, and materials shipped off-site. For Terminal, categories include products, fuels, maintenance materials, laboratory materials, and materials shipped off-site.

The chemical composition, characteristics, and physical state of the majority of materials identified in Table 21-1 and Table 21-2 are provided in the response to Question No. 33, which includes current

and historical Material Safety Data Sheets (MSDSs) that Ash Grove located during its review of records. To the best of Ash Grove's information and belief, the historical and current MSDSs included in Appendix 33 provide the most comprehensive available inventory of materials used at Rivergate and Terminal. In addition to these MSDSs, and to the extent that relevant information was identified during the records review process, representative raw material, by-product, and product specification sheets are provided in Appendix 21 for the Rivergate facility.

Based on the definition of material (definition 8), this response includes mention of raw materials, chemicals, and substances used in processes and other material used on-site to the best of Ash Grove's information and belief.[31]

TABLE 21-1. RIVERGATE MATERIALS[32]

Material	Purchase or Generation	Use	Treatment, Transportation, and Handling	Annual Quantity Information
Raw Materials				
Limestone	Purchased from quarries and transported to the facility via barges.	Used as a raw material.	Transported via conveyance system.	See Appendix 21.
Dolomite	Purchased from quarries and transported to the facility via barges.	Used as a raw material.	Transported via conveyance system.	See Appendix 21.
Magnesite Sand	Purchased from Northwest Alloys, Inc.	Used as a raw material	Transported to facility via rail car.	See Appendix 21.
Intermediate Products and Products				
Pebble Lime	Generated on-site.	Shipped to customers.	Transported via conveyance system.	See Appendix 21.

[31] According to the January 18, 2008 information request submitted to Ash Grove by EPA, the definition of "material" is "*any and all raw substances, commercial products, wastes, oil, petroleum, chemical, substances, or matter of any kind.*"

[32] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. As such, material storage and disposal are not addressed in this table.

TABLE 21-1. RIVERGATE MATERIALS[33] (CONT'D)

Material	Purchase or Generation	Use	Treatment, Transportation, and Handling	Annual Quantity Information
Intermediate Products and Products (Cont'd)				
Limestone	Generated on-site.	Shipped to customers.	Transported via conveyance system.	See Appendix 21.
Limestone Fines	Generated on-site.	Shipped to customers.	Transported via conveyance system.	See Appendix 21.
Limestone Flour	Generated on-site.	Shipped to customers.	Transported via conveyance system.	See Appendix 21.
Ground Product	Generated on-site.	Shipped to customers.	Transported via conveyance system.	See Appendix 21.
Dolomite	Generated on-site.	Shipped to customers.	Transported via conveyance system.	See Appendix 21.
Ag-Lime	Generated on-site.	Shipped to customers.	Transported via conveyance system.	See Appendix 21.
Chemical Lime	Generated on-site.	Shipped to customers.	Transported via conveyance system.	See Appendix 21.
Quicklime	Generated on-site.	Shipped to customers.	Transported via conveyance system.	See Appendix 21.
Hydrated Lime	Generated on-site.	Shipped to customers.	Transported via conveyance system.	See Appendix 21.
Fuels				
#2 Diesel Oil	Purchased from McCall Oil and Chemical	Currently used to fuel motorized vehicles. Records indicate that diesel was also used to fire the kilns during the operation of the Rivergate facility.	Transported to facility by McCall Oil and Chemical	See Appendix 21.
Used Oil	Received from various suppliers.	Used to fire kilns.	Transported to facility by various haulers	See Appendix 21.
Unleaded Gasoline	Purchased from Don Thomas Petroleum Inc.	Used to fuel motorized vehicles.	Transported to facility by Don Thomas	See Appendix 21.

[33] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. As such, material storage and disposal are not addressed in this table.

TABLE 21-1. RIVERGATE MATERIALS[34] (CONT'D)

Material	Purchase or Generation	Use	Treatment, Transportation, and Handling	Annual Quantity Information
Fuels (Cont'd)				
Propane	Purchased from Vancouver Welding and Air Gas	Maintenance for Cutting and Burning	Transported to facility by Vancouver Welding and Air Gas	See Appendix 21.
Natural Gas	Purchased from IGI Resources	Used to fire kilns.	Transported to facility via underground pipeline	See Appendix 21.
Landfill Gas	Received from the St. Johns Landfill.	Used to fire kilns and mills.	Transported to facility via underground pipeline	See Appendix 21.
Acetylene	Purchased from Vancouver Welding and Air Gas	Maintenance for Cutting and Burning	Tranported to facility by Vancouver Welding and Air Gas	Approximately 5,000 Cubic ft/year.
Coal	Purchased from Smokey River Coal Vancouver BC	Used to fire kilns.	Transported to facility by barge.	See Appendix 21.
Maintenance Materials				
Gear Oil / Lubricants	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment.	Transported to facility by Don Thomas Petroleum Inc.	Approximately 5000 lbs/year
Solvent	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment.	Tranported to facility by Don Thomas Petroleum Inc.	Approximately 75 gal/year
Hydraulic Oil	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment.	Transported to facility by Don Thomas Petroleum Inc.	Approximately 250 gal/year

[34] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. As such, material storage and disposal are not addressed in this table.

TABLE 21-1. RIVERGATE MATERIALS[35] (CONT'D)

Material	Purchase or Generation	Use	Treatment, Transportation, and Handling	Annual Quantity Information
Maintenance Materials (Cont'd)				
Motor Oil	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment.	Transported to facility by Don Thomas Petroleum Inc.	Approximately 410 gal/year
Transmission Fluid	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment.	Transported to facility by Don Thomas Petroleum Inc.	Approximately 340 gal/year
Paint / Paint Thinner	Purchased from various suppliers.	Used for plant and equipment maintenance	Transported to facility by various suppliers & Ash Grove personnel	Approximately 10 gal/year
Oxygen	Purchased from Vancouver Welding and Air Gas	Used for maintenance cutting and burning.	Transported to facility by Vancouver Welding and Air Gas	Approximately 10,000 cubic ft/year
Antifreeze	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment.	Transported to facility by Don Thomas Petroleum Inc.	Approximately 55 gal/year
Laboratory Materials				
Conductivity solution	Purchased for on-site use from Univar & various suppliers.	Used in material testing.	Transported to facility via delivery company.	1 liter each per year, pH4, pH7, and pH10 solution
Sodium Hypochlorite	Purchased for on-site use from Univar & various suppliers.	Used in material testing.	Transported to facility via delivery company.	Approximately 194 gal /year
Vinegar	Purchased from Bonneau Products and various suppliers.	Used in material testing.	Transported to facility via delivery company.	Approximately 290 gal/year
Hydrochloric Acid	Purchased for on-site use from Univar & various suppliers.	Used in material testing.	Transported to facility via delivery company.	Approximately 300 gal/year
Materials Shipped Off-site				
General Trash	Generated on-site during normal operation.	N/A	Transported offsite by Waste Management Inc.	Ash Grove does not maintain a record of this information
Neutralized Laboratory Wastes	Generated on-site during normal operation.	N/A	Disposed of in the laboratory drains to be treated at the local Publically Owned Treatment Works (POTW)	Small amounts as needed

[35] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. Material storage and disposal are not included in this table.

TABLE 21-1. RIVERGATE MATERIALS[36] (CONT'D)

Material	Purchase or Generation	Use	Treatment, Transportation, and Handling	Annual Quantity Information
Materials Shipped Off-site				
Sewage	Generated on-site during normal operation.	N/A	Prior to 2002, treated on-site in a septic system. Currently, discharge to the local POTW	According to sewer bills, prior to kiln shutdown in 2006, 2,100 cubic feet/month. After kiln shutdown in 2006, 1,1,00 cubic feet/month
Wood Waste	Generated on-site during normal operation.	N/A	Transported offsite by Waste Management Inc.	Ash Grove does not maintain a record of this information
Landscaping wastes	Generated on-site during normal operation.	N/A	Transported to American Composting by Ash Grove personnel	Approximately 2 cubic yards/year
Process Residue (waste lime, waste hydrate)	Generated on-site during normal operation.	Added to agricultural product from 1986 to the present	Records indicate that during early operation, prior to 1986, transported offsite, and prior to 1973, discharged to the Willamette River under a discharge permit.	Unknown
Baghouse Dust	Generated on-site during normal operation	Added to agricultural product from 1986 to the present	Handled on-site by Ash Grove personnel. Records indicate that during early operation, prior to 1986, transported offsite, and prior to 1973, discharged to the Willamette River under a discharge permit.	Unknown
Settling Basin Sediment	Generated on-site during routine cleaning of the settling basins	Currently added to agricultural product	Removed from settling basins with the use of a loader.	Unknown
Steel and metal scraps	Generated on-site during normal operation.	Recycled metal scraps	Transported for recycling by Schnitzer Steel	Approximately 80,000 lbs/year

[36] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. Material storage and disposal are not included in this table.

TABLE 21-1. RIVERGATE MATERIALS[37] (CONT'D)

Material	Purchase or Generation	Use	Treatment, Transportation, and Handling	Annual Quantity Information
Materials Shipped Off-site (Cont'd)				
Floor Dry/ Absorbent Materials	Generated on-site during normal operation.	Maintenance clean-up	Transported to Oil Re-refining for disposal/recycling by Oil Re-refining.	Approximately 300 gal/year
Asbestos containing material	Purchased and installed during initial plant Construction.	Used as siding and insulation	Non-friable transported to Grabhorn Landfill Friable transported to Wasco County Landfill	Average less than 5 4X8 sheets/year and/or 5 lbs insulation
PCB oil and flush oil from transformers	Purchased for on-site use.	Used as an electrical insulator	Transported for Disposal by Eastern Electric	One Time Event in 1988
PCB capacitors	Purchased for on-site use.	Used to store energy	Transported for Disposal by Eastern Electric	One Time Event in 1988
Electronic Components	Purchased for on-site use.	Used as work aid.	Transported to TCG Recycling for recycling	Approximately 1 4ftX4ft pallet
Batteries	Purchased for on-site use	Used as batteries	Transported to United Batteries for recycle/disposal by Ash Grove personnel.	Approximately 50 lbs per year.
Mercury Thermostats/ Switches	Purchased for on-site use	Used as thermostats or switches	Transported to Metro Central Disposal for recycling by Ash Grove personnel	One Time Event in conjunction with ODEQ program to remove mercury from use; Total equipment weight approximately 2.63 lbs.
Oily Rags	Generated on-site during normal operation.	Maintenance – Grease rags.	Transported to be cleaned and re-used by Cintas Corporation.	Approximately 10,000 rags / year
Oily Spill Material/Solids (Cleanup Material)	Generated on-site during normal operation.	Cleanup material.	Transported to Oil-Re-refining for disposal/recycling	Approximately 200 gallons /year.

[37] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. Material storage and disposal are not included in this table.

TABLE 21-1. RIVERGATE MATERIALS[38] (CONT'D)

Material	Purchase or Generation	Use	Treatment, Transportation, and Handling	Annual Quantity Information
Materials Shipped Off-site (Cont'd)				
Used Oil	Generated on-site during normal operation.	Machine and Equipment lubrication	Transported to Oil Re-refining for recycling by Oil Re-refining.	Approximately 360 gal/year
Used Oil Filters	Generated on-site during normal operation.	Mobile Equipment and Machine Maintenance	Transported to Oil Re-refining for recycling by Oil Re-refining.	Approximately 50 gallons uncrushed /year.
Used Grease	Generated on-site during normal operation.	N/A	N/A	Accounted for in grease rags and spill pads.
Used Antifreeze	Generated on-site during normal operation.	Mobile Equipment Maintenance	Transported to Oil – Re-refining for recycling.	Approximately 40 gal / year.
Used Parts Cleaner Solvent	Generated on-site during normal operation.	Parts cleaning	Transported to Oil-Re-refining for recycling	Approximately 25 gal / year.
Debris from oil tank cleaning	Generated on-site during normal operation.	N/A	Transported to Cascade General, Wasco County Landfill, and a PSC disposal site in Kent, WA for processing	One time event in 2005 77,996 Gallons to Cascade General, 11,066 Gallons to Wasco County, and 20 cubic yds of solids to a PSC disposal site in Kent, WA.
Dredge Spoils	Not generated on-site. Removed from Willamette River.	NA	Transported to Wasco County Landfill by Hickey Marine	2465 tons over approximately 15 years.
Passenger tires and passenger tires with rims	Generated on-site during normal operation.	Used for mobile equipment	Transported to RB Recycling	One time disposal event in 2005 included 55 tires
Used Light Bulbs	Generated on-site during normal operation.	Used in lights throughout the facility	Transported to a Waste Management landfill in Arlington, WA for disposal by Veolia Environmental Services	Bulbs have been collected for recycling and disposal since 2002. Prior to this date, bulbs were disposed with general trash. The single disposal event to date, which took place in 2006, included approximately 110 fluorescent tubes, 55 compact bulbs and 30 High Intensity Discharge (HID) bulbs accumulated over four years.

[38] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. Material storage and disposal are not included in this table.

TABLE 21-2. TERMINAL MATERIALS[39]

Material	Purchase or Generation	Use	Treatment, Transportation and Handling	Quantity Information [40]
Products				
Cement	N/A	N/A	Transported to and from the facility	200,000 plus tons distributed annually
Fuels				
Propane	Purchased from Amerigas	Mobile equipment	Transported by vendor to facility	Approximately 20 gallons/month
Diesel	Purchased from Don Thomas Petroleum Inc.	Mobile equipment	Transported by vendor to facility	3,095 Gallons in 2007 1,758 Gallons in 2008
Gasoline	Purchased from local 76 Station	Line handling boat, grounds, maintenance equipment	Transported by Ash Grove personnel	80 gallons per year
Maintenance Materials				
Automatic Transmission Fluid	Purchased from Car Quest/ Don Thomas Petroleum Inc.	Used to maintain equipment	Transported by vendor to facility	60 gallons per year
Solvents (including aerosol cans and biodegradable citrus spray)	Purchased from Dynnaco Inc.	Used to clean equipment	Transported by vendor to facility	78 lbs per year
Antifreeze	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment	Transported by vendor to facility	18 gallons per year
Lubricants	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment	Transported by vendor to facility	60 lbs per year
Boiler Treatment HCL	Purchased from Mt. Hood Chemical	Used for pH adjustment in the truck wash	Transported by vendor to truck in 55 gallon drums	990 gallons per year
Gear compound	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment	Transported by vendor to facility	50 gallons per year
Motor Oil	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment	Transported by vendor to facility	55 gallons per year
Oxygen	Purchased from Amerigas	Used to maintain equipment	Transported by vendor to facility	Four 250 ft^3 cylinders are kept on-site and replaced as needed

[39] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. This table does not duplicate the answers provided above.

[40] The quantities indicated are approximate maximum annual values since Ash Grove operations began.

TABLE 21-2. TERMINAL MATERIALS[41] (CONT'D)

Material	Purchase or Generation	Use	Treatment, Transportation and Handling	Quantity Information [42]
Maintenance Materials (Cont'd)				
Acetylene	Purchased from Airgas	Used to maintain equipment	Transported by vendor to facility	Three 125 cubic foot cylinders are kept on-site and replaced as needed
Argon	Purchased from Airgas	Used to maintain equipment	Transported by vendor to facility	Three 125 cubic foot cylinders are kept on-site and replaced as needed
Hydraulic Oil	Purchased from Don Thomas Petroleum Inc.	Used to maintain equipment	Transported by vendor to facility	110 gallons per year
Laboratory Materials				
Broken Concrete Cylinder Debris	Generated on-site	Used in material testing	Dump box to south bunker	Approximately 7.5 cubic feet generated per month.
Hydrated Lime	Ash Grove Rivergate Plant	Used in material testing	Dump box to south bunker	Approximately 10 lbs per year
Cement Additives	Purchased from Master Builders & WR Grace	Used in material testing	Delivered by vendor	Approximately 20 gallons of additives are located on-site at any given time
Materials Shipped Off-Site				
General Trash	Generated on-site	N/A	Collected in containers provided by the disposal vendor (Waste Management, Inc.) and removed by the disposal vendor as needed	Unknown
Used Oil	Generated on-site	N/A	Transported by Spencer Environmental and Northwest Oils	375 gallons per year
South Terminal Sewage	Generated on-site	South Terminal holding tank	Transported by River City Environmental	18,000 gallons per year
Used Oil Filters	Generated on-site	Mobile equipment	Transported by ORRCO, stored in vendor drums	1/4 drums per year

[41] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. This table does not duplicate the answers provided above.

[42] The quantities indicated are approximate maximum annual values since Ash Grove operations began.

TABLE 21-2. TERMINAL MATERIALS[43] (CONT'D)

Material	Purchase or Generation	Use	Treatment, Transportation and Handling	Quantity Information [44]
Materials Shipped Off-Site (Cont'd)				
Used Baghouse Filter Bags	Generated on-site	Dust collection	Collected in containers provided by the disposal vendor (Waste Management, Inc.) and removed by the disposal vendor as needed	200 bags generated bi-annually by the South Terminal
Used Antifreeze	Generated on-site	Mobile equipment	One-time disposal of prior owner's materials transported by Northwest Oils. (Vendors service equipment used in Ash Grove's operation and are responsible for disposing of used antifreeze).	Approximately 30 gallons
Product Residue (Concrete Debris, Soil and Dirt, Cement Dust)	Generated on-site	Residue	Transported by PSC, NRC, and Columbia metal works	Approximately 100 tons per year
South Terminal Lab Wash Water	Generated on-site	Wash water, contains sand, gravel, and small amounts of concrete, cement powder, and concrete additives.	Collected in a 125 gallon poly tank and treated in the truck wash system	Approximately 200 to 300 gallons per month.
Paint Related Materials	Generated on-site	Used in facility maintenance	Transported to Metro Central	434 lbs in 2008 250 lbs in 2007 125 lbs in 2006
Single Kay-Ray Gauge	Used by prior owner of the North Terminal; Ash Grove disposed of the device	Level sensing device	Transported by Thermo Electron	N/A
Truck Wash Sediment	Generated on-site during truck washing	Residue	Transported by Environmental Business Solutions, Inc. (EBS) and Waste Express	10.6 tons per year

[43] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. This table does not duplicate the answers provided above.

[44] The quantities indicated are approximate maximum annual values since Ash Grove operations began.

TABLE 21-2. TERMINAL MATERIALS[45] (CONT'D)

Material	Purchase or Generation	Use	Treatment, Transportation and Handling	Quantity Information [46]
Materials Shipped Off-Site (Cont'd)				
Oily Water	Generated on-site by cleaning of the hydraulic secondary containment basin. There was an emergency cleanup in September 2007. In February 2008, additional cleanup occurred.	Residue	Transported by Jammies Environmental	4,460 lbs on one occasion 3,060 lbs, and 2,460 lbs on one occasion
Creosoted Pilings	On-site prior to Ash Grove's construction of the South Terminal property	Structural support, used by prior owner of the South Terminal	Not certain. Ash Grove still pursuing relevant information	21 creosoting pilings in 1993-1994 timeframe
Small Batteries	Generated on-site during normal operation.	Used in various equipment (e.g., flashlights) throughout the facility	Off-site recycling/disposal has not yet taken place	Batteries have been collected in a five gallon bucket since 2005. The batteries will be recycled/disposed of off-site when the bucket is filled.
Used Light Bulbs	Generated on-site during normal operation.	Used in lights throughout the facility	Transported to the Rivergate facility, from where they are transported to a Waste Management landfill in Arlington, WA for disposal by Veolia Environmental Services	Bulbs have been collected for recycling or disposal since 2002. Prior to this date, bulbs were disposed with general trash. Light bulbs in most light fixtures were replaced in the 2006 timeframe. Since that time, bulbs have been replaced as needed.

[45] Material storage is discussed in the responses to Question Nos. 16 and 17. Material disposal is discussed in the responses to Question Nos. 26, 27, 36, 37, 39, 40, 41, 42, and 43. This table does not duplicate the answers provided above.

[46] The quantities indicated are approximate maximum annual values since Ash Grove operations began.

22. Describe all activities at each Property that were conducted over, on, or adjacent to the Willamette River. Include in your description whether the activity involved hazardous substances, wastes, or materials and whether any such hazardous substances, wastes, or materials were discharged, spilled, disposed or, dropped, or otherwise came to be located in the Willamette River.

In developing a response to Question No. 22, activities "adjacent to the Willamette River" was interpreted to mean those activities which take place solely on or near the Property shoreline.

Rivergate: The following activities have been conducted over, on, or adjacent to the Willamette River at the Rivergate facility during Ash Grove's ownership. Incidents involving spills are addressed in the response to Question No. 67.

- **Barge unloading.** The facility has received barge shipments of raw materials since the start of operation in 1964. The raw materials unloaded, which include limestone and dolomite, are not considered hazardous materials. Raw material is transferred from barges to the facility's conveyor system with the use of a clamshell crane and front-end loaders. Other than incidental spilling of limestone during the barge unloading process over time, Ash Grove personnel recall one event in the past ten years when some limestone spilled into the river as a result of a conveyor malfunction. The limestone was removed during maintenance dredging.
- **Dredging.** The portion of the Willamette River near the plant's barge unloading dock has been dredged several times over the course of operation at the Rivergate facility since the facility began operations in 1964.[47] Such maintenance dredging has been performed to remove sediment buildup on the river bottom which interferes with barge unloading.
- **Boat Mooring.** A prefabricated boathouse used as a private dock was installed over the Willamette River in 1989. The boathouse was moved off-site in 2000, and the area previously occupied by the boathouse was returned to its original natural condition according to ODEQ.[48] Ash Grove held a state waterway lease for the boathouse from April 28, 1989 until March 31, 2000.
- **Construction.** Construction of the original berth for barges and barge unloading equipment took place adjacent to the Willamette River during original facility construction in 1963 and 1964.

Terminal: The following activities have been conducted over, on, or adjacent to the Willamette River at the Terminal facility during Ash Grove's ownership. Ash Grove acquired the South Terminal on December 22, 1992 (recorded December 29, 1992) and operations began there in December, 2004. Ash Grove acquired North Terminal on December 22, 2005 (recorded December 29, 2005) and operations began there in April 2007.

[47] Records were located for one dredging event, which occurred in 2007. During interviews with Ash Grove personnel, personnel stated that they believed additional dredging has occurred during the operation of the Rivergate facility but no records were found.

[48] Per correspondence received from ODEQ on March 21, 2000 which cancelled State Waterway Lease ML-5146. Correspondence can be found in Appendix 22.

- **Ship unloading.** The North Terminal has received shipments of cement since April 2007. Cement is unloaded from ships moored at the unloading dock with the use of a large vacuum arm which is inserted into the hold of the ship. An enclosed pneumatic conveyor system transports material to storage silos. The ships transporting cement are not owned or under the control of Ash Grove, so Ash Grove has no knowledge of the material on the ships besides the cement delivered to the Terminal facility.
- **Dredging.** Ash Grove has not conducted dredging activities at the Terminal facility during its ownership.
- **Construction.** At the South Terminal, between 1993 and 1995, a barge mooring structure was installed. The barge mooring structure was intended to be used as a cement offloading facility; however, the barge mooring structure has not been used. At the North Terminal, the pneumatic unloading arm, which is located over the Willamette River, was replaced in the 2006 to 2007 timeframe.

23. For each Property at which there was or is a mooring facility, dock, wharf or any over-water structure, provide a summary of over-water activities conducted at the structure, including, but not limited to, any material loading and unloading operations associated with vessels, material handling and storage practices, ship berthing and anchoring, ship fueling, and ship building, retrofitting, maintenance, and repair.

Rivergate: The following over-water structures are currently located or were at one time located at the Rivergate facility.

- **Barge unloading dock.** Barge unloading takes place at the barge unloading dock at the Rivergate facility. Raw material is transferred from barges to the facility's conveyor system with the use of a clamshell crane and front-end loaders. Ash Grove has allowed access at the property for VanPort Marine's barge maintenance activities.
- **Boathouse.** A boathouse used as a private dock existed at the Rivergate facility from 1989 to 2000. A 52 foot boat was moored during the winter at the boathouse during this time period. During the summer, the boat was taken to the Oregon coast where it was used for business development. Fueling did not occur at the boathouse. General boat maintenance did occur at the boathouse and was completed by Ash Grove personnel.

Terminal: The following over-water structures are currently located or were at one time located at the Terminal facility.

- **Ship unloading docks.** Ship unloading takes place at a ship unloading dock at the North Terminal. The unloading dock was installed prior to Ash Grove's acquisition of the property. At this dock, cement is unloaded from ships with the use of a large vacuum arm which is inserted into the hold of the ship. An enclosed pneumatic conveyor system transports material to storage silos.

  The ships delivering cement to the Terminal facility are not owned by Ash Grove nor are they under the control of Ash Grove. Therefore, while ship fueling and maintenance occurs at this dock, these activities are beyond the scope of Ash Grove's direction or control. Ash Grove is

aware that refueling of the ships by third parties takes place at the dock. In addition, onshore maintenance companies access the ships through Ash Grove's property.

24. Describe all activities conducted on leased aquatic lands at each Property. Include in your description whether the activity involved hazardous substances, waste(s), or materials and whether any such hazardous substances, waste(s), or materials were discharged, spilled, disposed of, dropped, or otherwise came to be located on such leased aquatic lands.

Rivergate: To the best of Ash Grove's information and belief, the lone activity that occurred on the land leased to Ash Grove in Submerged and Submersible Land Lease ML-743, which became lease number LE-5146, was the storage of a private boat in the boat house. Ash Grove did maintain the boat in the boat house, but to the best of Ash Grove's information and belief, this activity did not involve any discharge, spill, disposal or other placement of hazardous substances upon the leased aquatic land.

Terminal:
Submerged and Submersible Land Lease ML-10587: Ash Grove has used the leased area for the silo storage of cement. As part of the purchase of the North Terminal, Ash Grove and the seller of the North Terminal (CGAC) entered into an unloader agreement, pursuant to which the seller reserved certain rights respecting the unloading, handling, storage and transshipment of alumina at the facility for a maximum period of fifteen years. However, the seller has to date not exercised any of these rights and there has been no unloading, handling, storage or transshipment of alumina at the North Terminal during the period of Ash Grove's ownership. To the best of Ash Grove's information and belief, other than incidental releases of small quantities of cement there have not been releases of material, hazardous or otherwise, into the leased aquatic lands during the time period that Ash Grove has held this lease.

25. Please describe the years of use, purpose, quantity, and duration of any application of pesticides or herbicides on each Property during the period of investigation (1937 - present). Provide the brand name of all pesticides or herbicides used.

Rivergate: Monthly visual inspection reports for the tank farm area, which are required by the facility's SPCC plan, indicate that weeds in the area are monitored and are periodically sprayed with herbicides or removed from the tank farm area. According to records and based on interviews with appropriate personnel, since visual monitoring of the tank farm began when required in 2005, weeds have been sprayed with herbicide approximately three times. Ash Grove personnel use a solution of herbicide and water to keep the tank farm free of weeds and in good condition. According to interviews with Ash Grove personnel, approximately one pint of solution is used during each spraying event.

MSDSs maintained on-site at the Rivergate facility were reviewed to identify the specific herbicides used, which include Clean Crop® Simazine Herbicide, Clean Crop® Mec Amine-D, Crossbow® Weed & Brush Killer (Crossbow), and Roundup Herbicide® (Roundup). MSDSs for these herbicides are included in Appendix 25. To the best of Ash Grove's information and belief, the historical and current MSDSs included in Appendix 25 provide the most comprehensive available inventory of

herbicides used at the Rivergate facility. No other pesticides or herbicides were identified as a result of the records review and personnel interview process.[49]

Terminal: Terminal facility records, including current and historical MSDSs, were reviewed and appropriate personnel interviewed to evaluate pesticide and herbicide usage at the property. No documents related to the use of pesticides or herbicides at the Terminal facility were identified. Based on interviews with Ash Grove personnel, Crossbow and Roundup are used as herbicides at the Terminal facility. Crossbow has been used as needed to remove blackberries and woody plants for approximately the past five years. Roundup is used by a commercially licensed applicator, which has been hired by Ash Grove to spray walkways to keep them unobstructed as required under Public Utilities Commission (PUC) regulations. The applicator sprays the walkways annually using a spray truck. In addition, Ash Grove personnel have used Roundup as needed to treat unwanted plants at the Terminal facility. MSDSs for these materials are provided in Appendix 25.

During the records review process, Ash Grove identified a 2007 analytical report prepared in anticipation of dredging by Severn Trent Laboratories, Inc. for TestAmerica Analytical Testing Corp. that tested for the presence of chlorinated pesticides among many analytes in sediment from the Willamette River near the Terminal facility using EPA SW-846 Method 8081A (Organochlorine Pesticides by Gas Chromatography). The results of this analysis were non-detect for each sample.

26. Describe how wastes transported off the Property for disposal are and ever were handled, stored, and/or treated prior to transport to the disposal facility.

The response to this Question includes a description of waste handling, storage, and treatment activities associated with wastes that were transported from Rivergate and Terminal during its ownership of the sites. Only those activities under the control of Ash Grove are addressed in this response.[50] These waste management activities are described in Table 26-1 and Table 26-2 for the Rivergate and Terminal facilities, respectively.

TABLE 26-1. RIVERGATE WASTE HANDLING/STORAGE/TREATMENT PRIOR TO OFF-SITE DISPOSAL

Waste	Handling/Storage/Treatment Prior to Off-Site Disposal
General Trash	Trash from receptacles throughout the facility is collected in a dumpster located against the north center wall of the warehouse.
Neutralized Laboratory Wastes	Laboratory wastes are generated in the laboratory and disposed of down the laboratory drains after being neutralized.
Sewage	Prior to approximately 2002, sewage was treated in an on-site septic system. From approximately 2002 to the present, sewage is discharged to the local POTW. Sewage is not treated at the Ash Grove facility prior to discharge to the POTW.

[49] An MSDS for Procter & Gamble's Comet Cleanser with Chlorinol® was identified during the records review process. The MSDS for this material indicates that "this product is an EPA registered pesticide;" however, to the best of Ash Grove's information and belief, this material was used as a cleaner rather than a pesticide at the Rivergate facility.

[50] The handling, storage, and treatment of wastes under the control of Waste Carriers, as defined in Question No. 40, are not included in the response to Question No. 26.

TABLE 26-1. RIVERGATE WASTE HANDLING/STORAGE/TREATMENT PRIOR TO OFF-SITE DISPOSAL (CONT'D)

Waste	Handling/Storage/Treatment Prior to Off-Site Disposal
Wood Waste	Stored along the north fence line just north of the warehouse.
Landscaping wastes	In recent history, small quantities of landscaping wastes were stored in a pile on the southwest corner of the property. This practice was discontinued, and landscaping debris is now placed in a company truck and hauled off-site for composting
Process Residue (waste lime, waste hydrate)	Sold as product from 1986 to the present. Prior to 1986, this material was disposed of off-site. Prior to off-site disposal during early operation, this material was collected in a stockpile.
Baghouse Dust	This material has been sold as product or used as an intermediate product in facility operations from 1986 to the present. Prior to 1986, this material was disposed of off-site. Current Ash Grove personnel are not aware of where this material was stored prior to off-site disposal in the past.
Steel and metal scraps	Segregated by type prior to shipment offsite. Stainless steel scrap is stored in a dumpster located just east of bin 6 pebble bin. In the past, other steel and metal scrap was stored in a dumpster south of kiln #3.
Floor Dry/Absorbent Materials	This material is collected in 55-gallon drums with lids located south of the bermed area of the oil storage tanks in the #7 storage area.
Asbestos Containing Material	This material was removed from on-site structures, handled according to relevant regulatory requirements, and disposed promptly.
PCB oil and flush oil from Transformers	Because of its nature and use, this material was not stored prior to disposal.
PCB Capacitors	Because of its nature and use, this material was not stored prior to disposal.
Electronic Components	Because of its nature and use, this material was not stored prior to disposal.
Batteries	Batteries are stored on a 4 ft by 4 ft pallet located on a concrete surface under a covering along the south wall of the maintenance building/shop. When the pallet is full, it is transported off-site for recycling/disposal by vendor.
Mercury Thermostats/ Switches	Because of its nature and use, this material was not stored prior to off site disposal under ODEQ mercury disposal program.
Oily Rags	Oily rags are collected in a covered 20-gallon drum on the southwest side of the maintenance shop.
Oily Spill Materials/Solids (Cleanup Material)	The soils are stored near the tank farm on the paved area just west of the containment wall and east of the oil off-loading building.
Used Oil	Used oil is currently managed in 200 gallon totes located in the maintenance and heavy equipment shops. The totes are located within secondary containment.
Used Oil Filters	Used oil filters are hot drained and collected in 55-gallon drums in the #7 storage area prior to shipment offsite for recycling.
Used Grease	Used grease is accumulated in grease rags and spill pads.
Used Antifreeze	Stored in a 55-gallon drum in the #7 storage area.
Used Parts Cleaner Solvent	Stored in a 55-gallon drum in the #7 storage area.
Debris from oil tank cleaning	Prior to off-site disposal, this material was located within the used oil tanks.
Dredge Spoils	Prior to off-site disposal, this sediment was located in the Willamette River.

Waste	Handling/Storage/Treatment Prior to Off-Site Disposal
Passenger Tires and Passenger Tires with Rims	These tires were stockpiled near the southeast corner of the kilns prior to off-site disposal.
Used Light bulbs	This material is stored in the attic above the electrical storeroom/office, which is located to the west of the kiln department. The bulbs are accumulated over several years prior to recycling or disposal by vendor.

TABLE 26-2. TERMINAL WASTE HANDLING/STORAGE/TREATMENT PRIOR TO OFF-SITE DISPOSAL

Waste	Handling/Storage/Treatment Prior to Off-Site Disposal
General trash	General trash is collected in vendor containers north of the rail loadout building and at the entrance to South Terminal prior to weekly pick-up.
Used Oil	According to the 2006 SPCC Plan for the Terminal facility, used oil is stored in a 300-gallon above ground storage tank located in the seven-bay garage. The tank is equipped with a steel secondary containment structure, and is located within the bermed tertiary containment area.
South Terminal Sewage	A 1,500 gallon holding tank is used for the storage of sewage at the South Terminal.
Used Oil Filters	Used oil filters are stored in ORRCO provided steel drums located in the seven-bay garage and in the rail unloading building at South Terminal.
Used Baghouse Filter Bags	Many filter bags were used on-site by the prior owner of the North Terminal, CGAC. Ash Grove arranged for the disposal of these filter bags during plant renovation in 2006. Now upon removal from use, filter bags are temporarily stored in containers provided by Waste Management until they are picked up for disposal.
Used Antifreeze	A small quantity of used antifreeze was stored in the 7 bay garage at the Terminal in a steel drum during the operation of the prior owner, CGAC. This material was removed by Northwest Oils in conjunction with facility renovation. Ash Grove does not store used antifreeze. Vendors service equipment from Ash Grove's operations and are responsible for disposing of used antifreeze.
Product Residues (including Concrete Debris, Soil and Dirt, Cement Dust)	Production wastes are generated during normal operation of the Terminal unloading and distribution facility. Product residue is stored in the concrete bunker at South Terminal.
Cement from Single Ship	On one occasion, in May 2007, a ballast pipe broke onboard a ship resulting in the destruction of approximately 750 tons of cement on board. This material was removed and disposed of by Columbia Metal Works.
Paint Related Material	These materials were used on-site by the prior owner of the North Terminal, CGAC. These materials are stored in the boat house building as well as the seven-bay garage.
Kay-Ray Gauge	This device was used by the prior owner of North Terminal, CGAC, prior to disposal.
Truck Wash Sediment	Truck wash sediment collects in the truck wash settling basin. The truck wash water is tested monthly as required by the 1700-B permit.
Concrete from Lab	Crushed concrete cylinders from stress testing in the lab are taken to the concrete storage bunker at South Terminal prior to being taken off-site for disposal.
Oily Water	A leak of hydraulic oil from the hydraulic rail indexer in the South Terminal basement was contained in a secondary containment area. This material was collected and disposed of by Jammies Environmental.

TABLE 26-2. TERMINAL WASTE HANDLING/STORAGE/TREATMENT PRIOR TO OFF-SITE DISPOSAL (CONT'D)

Waste	Handling/Storage/Treatment Prior to Off-Site Disposal
Creosoted Pilings	Creosoted pilings were located at the South Terminal property prior to Ash Grove's initial construction activities. During construction of the South Terminal barge mooring structure and dock, 21 pilings were removed under the direction of a contractor. Ash Grove is still seeking relevant information.
Used Light Bulbs	Used light bulbs are accumulated in cardboard boxes located in the 7 bay garage prior to off-site recycling /disposal by vendor.
Small Batteries	Small batteries used throughout the facility are accumulated in a five gallon bucket located in the Administration Building. It should be noted that large batteries are not stored because they are exchanged with vendor.

27. Has Respondent ever arranged for disposal or treatment or arranged for transportation for disposal or treatment of materials to any Property (including the Willamette River) within the Investigation Area? If so, please identify every Property that Respondent's materials were disposed or treated at in the Investigation Area. In addition, identify:

a. the persons with whom the Respondent made such arrangements;
b. every date on which Respondent made such arrangements;
c. the nature, including the chemical content, characteristics, physical state (e.g., solid, liquid), and quantity (volume and weight) of all materials involved in each such arrangement;
d. in general terms, the nature and quantity of the non- hazardous materials involved in each such arrangement;
e. in general terms, the nature and quantity of any hazardous materials involved in each such arrangement;
f. the owner of the materials involved in each such arrangement, if not Respondent;
g. all tests, analyses, analytical results or manifests concerning each hazardous material involved in such transactions;
h. the address(es) for each Property, precise locations at which each material involved in such transactions actually was disposed or treated;
i. the owner or operator of each facility at which hazardous or non-hazardous materials were arranged to be disposed at within the Investigation Area;
j. who selected the location to which the materials were to be disposed or treated;
k. who selected the Property as the location at which hazardous materials were to be disposed or treated; and
l. any records of such arrangement(s) and each shipment.

Rivergate: To the best of Ash Grove's information and belief, there have been six instances of materials from the Rivergate facility being disposed of within the Investigation Area. Documents associated with these shipments can be found in Appendix 27.

- **Early 1990:** In early 1990, two underground storage tanks were decommissioned at the Rivergate facility. The tanks were transported as scrap steel to Schnitzer Steel located at 12005 N Burgard Road, Portland, OR 97203.

- **June 2005**: An invoice for tank cleaning services indicates that during cleaning of the used oil tanks, 77,996 gallons of oil remaining in the tanks was shipped to the Cascade General. The Cascade General facility is located on Swan Island at 5555 North Channel Avenue, Portland, OR 97217. This disposal location was selected by PSC, the company which cleaned the tanks. To the best of Ash Grove's information and belief, the oil was burned for fuel at the Cascade General facility.

- **May 2008**: As part of ODEQ mercury disposal program, on May 1, 2008, Ash Grove personnel delivered a small amount (2.63 lbs) of mercury-containing equipment (thermostats and switches) to the Metro Central Hazardous Waste landfill located at 6161 NW 61st Ave, Portland, Oregon 97210, and the individual at Ash Grove responsible for arranging the delivery was Glenn Dollar.

- **Ongoing**: According to Rivergate's Waste Management Plan, Schnitzer Steel is called to dispose of scrap metal when the on-site scrap metal dumpster is full. Schnitzer's facility is located at 12005 N Burgard Road, Portland, OR 97203.

Terminal Facility: To the best of Ash Grove's knowledge, there have been two shipments of materials from the Terminal facility to sites within the Investigation Area. Documents associated with these shipments can be found in Appendix 27. These shipments occurred in September 1995 and September 2007. Available information regarding each shipment that is responsive to any of the subparts of Question No. 27 is included in the following shipment descriptions.

- **September 1995:** A September 22, 1995 memo from Bruce R. Geis at Sunwest Energy Corporation (Sunwest) to Stan Webb at Ash Grove describes this shipment. The shipment consisted of 120 gallons of used oil, which was picked up by Sunwest from Ash Grove's Terminal facility on September 12, 1995. The used oil was shipped to Ash Grove's Rivergate facility at 13939 North Rivergate Blvd. Portland OR 97302. The memo indicates that the used oil was to be burned for energy recovery at the Rivergate facility. Sunwest's EPA ID number, as provided in the memo, is ORD 981-765-571. No further information on this shipment was identified during the records review process and during interviews with current and former Ash Grove personnel. Efforts to locate either Bruce R. Geis or Sunwest to obtain additional information were unsuccessful.

- **September and October 2007:** On September 12, 2007, Ash Grove personnel delivered waste including paint, paint thinner, and patching cement left at the Terminal facility by the previous owner to the Metro Central Hazardous Waste facility at 6161 NW 61st Ave.,

Portland, Oregon 97210. Specific quantities of individual materials included in this waste delivery are provided in the documents included in Appendix 27. The waste contained eleven (11) 1-gallon containers, five (5) 5-gallon containers, and one (1) 4.25-gallon container. A list of active ingredients and contaminants contained in each component of the shipment is also provided in the documents in Appendix 27.

On October 29, 2007, Ash Grove personnel delivered additional paint supplies left at the Terminal facility by the previous owner to the Metro Central Hazardous Waste facility. The waste consisted of ten (10) 1-gallon containers and five (5) 5-gallon containers of paint supplies.

The individual at Ash Grove responsible for arranging these deliveries was Glenn Dollar.

28. Describe the plants and other buildings or structures where Respondent carried out its operations at each Property within the Investigation Area (excluding locations where ONLY clerical/office work was performed).

The response to Question No. 28 is provided in Table 28-1 for the Terminal and Table 28-2 for Rivergate.

TABLE 28-1. BUILDING AND STRUCTURE DESCRIPTIONS AT THE TERMINAL FACILITY

Building or Structure	*Description*
North Terminal (Ship and Rail)	
Boat House	Provides a docking location for boats.
Garden Shed	Stores landscaping equipment.
Four Rail Car Movers	Vehicles capable of traveling on roads and rail tracks, used to move small numbers of railroad cars.
Rail Load Out Building	Product is loaded into railcars.
7-Bay Garage	Serves as vehicle storage location.
Vault	Used for stormwater collection and solids removal.
Administration Building and Shop	Shop houses general facility maintenance equipment. Description of administration building not requested.
Silo #1, #2, and #3	Product is stored in silos prior to shipment.
Ship Unloader and Blower Room	Product is unloaded from barges using a pneumatic unloader.
Dock	Provides access for ship unloading operations.
Reclaim System Tower	Controls pneumatic reclaim from silos to railcar loading facility.
Enclosed Conveyor System	Facilitates the unloading, transport, storage, and shipment of cement between the North and South Terminals.

TABLE 28-1. BUILDING AND STRUCTURE DESCRIPTIONS AT THE TERMINAL FACILITY (CONT'D)

Building or Structure	Description
South Terminal (Rail and Truck)	
Shop	Houses general facility maintenance.
Offices and Lab	Product testing is performed in the lab. Description of office not requested.
Truck Wash Facility including a pH adjustment System	Trucks are washed before leaving the facility. The truck wash water is adjusted for pH before being discharged to the permitted discharge area.
Concrete Silos	Product is stored prior to shipment.
Permitted Discharge Area	Runoff from the truck wash is diverted to the permitted discharge area for filtration and return to the groundwater system.
Barge Moorage Structure	Installed but not used.
Enclosed Conveyor System	Facilitates the unloading, transport, storage, and shipment of cement between the North and South Terminals.
Concrete Bunker	Stores aggregate materials
Holding Tank	Stores sewage generated by the South Terminal facility

TABLE 28-2. BUILDING AND STRUCTURE DESCRIPTIONS AT THE RIVERGATE FACILITY

Building or Structure	Description
Conveyor System	Facilitates the unloading, transport, storage, and shipment of raw material, intermediate product, and product (system is both above ground and underground).
Product Stockpiles	Products are stored in stockpiles on the facility property.
Settling Basins	Suspended solids are removed from process water in these structures.
2 Electric Substations	Substations house electrical equipment.
Parts Room/Lunch Room/Change Room/Lab Building	Product quality tests are conducted in the lab.
Maintenance Shop	Houses general facility maintenance.
Fuel Oil Storage Containment Structure	Fuel oil was historically stored in two oil tanks located in a containment area equipped with spill pads.
Kiln Department (permanently decommissioned in May 2006), including three calcimatic kilns and a kiln control room	It should be noted that the calcimatic kilns and corresponding pollution control equipment are no longer operational. The kiln is scheduled for demolition, but as of the effective date of this submission, this equipment is still at Rivergate. Before the kilns were decommissioned in May 2006, limestone was heated to produce calcium oxide (i.e., quicklime).
Hydrator Department, including a hydrator	In the hydrator, quicklime is mixed with water to form calcium hydroxide or hydrated lime. The hydrator is equipped with sizing and pulverizing equipment that classifies the material to a fine powder. This area is has been under the control of Graymont since June 1, 2006.
Warehouse	Products are stored in this structure prior to shipment.
Office Building	Description not requested.
Limestone Barge Unloading System, including a Clamshell Crane	Raw materials, including limestone and dolomitic rock, are unloaded from barges at the facility's dock.

TABLE 28-2. BUILDING AND STRUCTURE DESCRIPTIONS AT THE RIVERGATE FACILITY (CONT'D)

Building or Structure	Description
Ag Mill Department, including 4 roller mills	In this department, roller mills are used to pulverize limestone and dolomitic rock to fine powder. Each mill is equipped with a burner to flash dry the material as it is pulverized. Each mill is also equipped with sizing equipment to classify material to a desired fineness.
Material Storage Structures	Products are stored in these structures prior to shipment. For a complete listing of storage structure, see the response to Question 16.
Propane Tank	Stores propane used to fuel equipment throughout the facility.

29. Provide a schematic diagram or flow chart that fully describes and/or illustrates the Respondent's operations on each Property.

Terminal: A process flow diagram of the Terminal facility can be found in Appendix 29.

Rivergate: A process flow diagram of the Rivergate facility can be found in Appendix 29.

30. Provide a brief description of the nature of Respondent's operations at each location on each Property including:

Question No. 30 requests a "brief description of the nature of Respondent's operations at each location on each Property..." The term "location" is not defined in the information request and it is unclear as to what EPA intends by the phrase "each location." Therefore, Ash Grove has interpreted this question to request a "brief description of the nature of Respondent's operations at each Property."

a. The date such operations commenced and concluded; and

Terminal: The South Terminal property was purchased in late 1992. Following construction of the Terminal, the facility became operational in December 1994. The North Terminal was purchased in late 2005. The existing facilities were upgraded and the first ship arrived at the North Terminal unloading dock in April 2007.

Rivergate: The property was purchased in April 1963 and the facility was constructed and operational by 1964. Operation has been continuous since 1964, although operations have been modified substantially since June 2006.

b. The types of work performed at each location, including but not limited to the industrial, chemical, or institutional processes undertaken at each location.

Terminal: Material is unloaded from ships and railcars, transferred to storage silos then loaded out to trucks and railcars. The North Terminal consists of ship unloading, conveyors to the storage elevator and silos, and a railcar load-out point. The South Terminal consists of a railcar and truck loadout facility, storage elevator, and truck load-out point. The two sides will be connected by a fully enclosed pipe conveyor which is currently under construction.

Rivergate: The facility historically was a lime manufacturing plant. The process included raw material handling and sizing of limestone and dolomitic rock; hydrating lime to produce calcium hydroxide; and using roller mills/dryers to produce agricultural lime. Calcimatic kilns to produce chemical lime are located at the facility but were permanently decommissioned in May 2006. However, Ash Grove also continues to operate grinding mills on the Rivergate Plant premises to produce powdered limestone and dolomite and sell such products in the area.

Hydration operations are currently under the control of Graymont Western US, Inc. (Graymont) and have been since June 1, 2006. Graymont began leasing the structures and equipment associated with hydration operations from Ash Grove when the kilns were permanently decommissioned in May 2006. Graymont receives rail shipments of quick lime, which is the raw material for the hydration process, and sells either quicklime or hydrated lime in bulk or bags to their customers in the area.

31. If the nature or size of the Respondent's operations changed over time, describe those changes and the dates they occurred.

Rivergate: A detailed listing of major additions, demolitions, or changes on, under or about the Property, its physical structures or to the property itself, and any planned additions, demolitions or other changes to the Property is provided in Table 13-3 (this table is provided in response to Question No. 13k). In addition, the time period of general operations at the Rivergate facility can be found in Table 20-1. Changes in fuel usage are outlined in Table 20-2 for the kilns and Table 20-3 for the milling department (These three tables are included in response to Question No. 20).

Terminal: A detailed listing of all major additions, demolitions, or changes on, under or about the Property, its physical structures or to the property itself, and any planned additions, demolitions or other changes to the Property is provided in Table 13-4 (this table is provided in response to Question No. 13k). In addition, the time period of general operations at the Terminal facility can be found in Table 20-4 (this table is provided in response to Question No. 20).

32. List the types of raw materials used in Respondent's operations, the products manufactured, recycled, recovered, treated, or otherwise processed in these operations.

Table 32-1 and Table 32-2 provide listings of the raw materials used and products produced by the present-day operation of the Terminal and Rivergate facilities, respectively.

TABLE 32-1. TERMINAL RAW MATERIALS AND PRODUCTS

Raw Materials	Products[51, 52]
Portland Cement	Portland Cement

[51] As a distribution terminal, the imported material is not physically or chemically altered in any way before off-site shipment. Therefore, the Terminal's raw materials are identical to its products.

[52] Although powdered alumina is not currently delivered to the Terminal, it should be noted that the Terminal is permitted to accept shipments of powdered alumina under ACDP number 26-0146. No such shipments have been received during the period of Ash Grove's ownership.

TABLE 32-2. RIVERGATE RAW MATERIALS AND PRODUCTS

Raw Materials	Products
Limestone	Agricultural Lime
Dolomitic Rock	Hydrated Lime (Calcium Hydroxide)
Quicklime	Quicklime[53]

33. Provide copies of Material Safety Data Sheets (MSDS) for materials used in the Respondent's operations.

MSDS for the Rivergate and Terminal facilities are included in Appendix 33. Appendix 33 contains the MSDS located during the record review conducted at the Rivergate and Terminal facilities.

34. Describe the cleaning and maintenance of the equipment and machinery involved in operations including but not limited to:

In general, Ash Grove cleans and maintains equipment and machinery in accordance with manufacturer's recommendations and O&M plans. The O&M plans have not been included in this response, but can be provided upon request. It should be noted that the kilns were decommissioned in May 2006. Graymont has been operating select equipment, including the hydrator process, at Ash Grove's Rivergate facility since June 1, 2006. Ash Grove does not have information related to maintenance activities performed by Graymont on this equipment.

Diligent efforts were made to locate maintenance records for equipment and machinery at the Rivergate facility. Despite those efforts, Ash Grove found no documents that pre-date 1987. Interviews with current and former employees confirmed, to the best of their information and belief, that routine maintenance and cleaning were performed as recommended by manufacturers before 1987. Based on the records reviewed for the Rivergate facility, the following specific maintenance activities have occurred during the specified time period:

- 1987 – Feed system replaced on the Ag Mills.
- 1988 – Replaced old scraper for kiln #3.
- 1989 – Replaced inside wall castings and water seals on both of the kilns. Replaced some of the buttress block and rim tile on kiln #3. Added screens to two of the Ag Mills.
- 1991 – Installed two dust collecting loading spouts in the Pebble Quicklime loading system. Installed new clean out chamber on heat exchanger for kiln #2. Replaced wheel and motor on #3 combustion fan including shaft and bearings. Completed back-up controls for Ag Mill. Replaced Double Deck Screen in storage. Replaced #3 cooler air locks.
- 1991 – Northwest Metal Fab and Pipe, Inc. was contracted to perform various maintenance tasks such as line walks, check and maintain the odorizor and odorimeter, routine calibration of meters, etc.

[53] The Rivergate facility has historically operated calcimatic kilns to produce quicklime from limestone. Currently, hydrator operation and quicklime processing are under the control of Graymont. See the response to Question 30.b for more information.

- 1992 – Ordered and installed new loading spouts on all pebble spouts, and two spouts for the hydrate bins. Replaced the entire weather roof and vents on kiln #3. Installed new fan and shaft on #1 kiln exhaust fan and replaced the 150 HP motor. Overhauled all three Ag Mills and replaced the wear rings. Replaced the head pulley on the west ag-lime conveyor. Repaired #2 kiln feed chutes and the dust collector duct work. Added air cylinders to kiln #1 and #2 scrapers to replace the old counter weights. Rebuilt chutes to rock boxes for kilns #1 and #2.
- 1993 – Replaced bags on Ag Mill dust collectors and kiln dust collectors, and tightened bags as necessary. Replaced a felt ring for the #3 Ag Mill dust collector.
- 1993 – Rebuilt the hearth on kiln #1. Improved the water seal system and installed water cooled beams on scraper. Installed a final screen for removing fine particles for OSM loads. Installed a reclaim screen for the Ag Mill feed. Added new instruments and controllers on kilns #1 and #2. Replaced the vibrating unit on the triple deck screen.
- 1994 – Replaced bags on Ag Mill dust collectors and kiln dust collectors. Tightened bags as necessary.
- 1994 – Document indicates that maintenance on air conditioners such as filter changes are performed as required.
- 1995 – Replaced bags on Ag Mill dust collectors and kiln dust collectors. Tightened bags as necessary.
- 1996 - Replaced bags and bags with holes on Ag Mill dust collectors and kiln dust collectors. Changed felt rings on #2 Ag Mill dust collector.
- 1997 – Fixed the motor base, installed new drive belts and new bearings on rapper for 17-407 American dust arrestor. Replaced bags and bags with holes on Ag Mill dust collectors and kiln dust collectors. Changed felt rings on #1 and #3 Ag Mill dust collectors.
- 1998 – Replaced bags and bags with holes on Ag Mill dust collectors and kiln dust collectors.
- 1999 – Replaced bags and bags with holes on Ag Mill dust collectors and kiln dust collectors.
- 1999 – Gutted and replaced dust bags with Nomex dust rings.
- 1999 – Adjusted and welded bolts to shaft for #5 section poppet valve on #3 kiln.
- 1999 – Installed new air cylinder, welded bolts to shaft for #8 section poppet valve on #3 kiln.
- 1999 – Replaced and adjusted belts for the #1 and #2 dust collector scrapper fan.
- 1999 – Installed new seals, regulator, and gage for #3 dust collector rotary valve leak.
- 1999 – Replaced four bags and one compression O-ring on dust collector.
- 1999 – Replaced packing u-cup on #3 rotary valve.
- 1999 – Replaced bags on #3 kiln dust collector, #1 and #2 kiln baghouses, and #3 scraper.
- 1999 – Replaced bearing and packing cups on #3 kiln baghouse .
- 1999 – Replaced motor on dust collector rotary valve.
- 1999 – Replaced RV Seals, and end plates. Patched pipe.
- 1999 – Replaced diaphragms on dust collector.
- 2000 – Replaced bags on dust collectors.
- 2000 – Replaced bags, compression O-ring, armored O-ring, felt gaskets, and retained cups on #2 Ag Mill dust collector.
- 2000 – Repaired cylinder, installed new solenoid valve and auto drain for cylinder.
- 2000 – Repaired and re-welded air reversal valve plates, installed new bearings, replaced v-belts, tightened bolts in side walls and installed new bags for dust collector.

- 2004 – Replaced bags in Ag Mill #3 & #4, kiln #1 & #3, and hydrator dust collectors.
- 2005 – Ash Grove requested proposals for tank cleaning, oil recovery and disposal services for the tank farm at Rivergate. The services for those activities were completed. See answers to Question Nos. 21 and 27 for additional information regarding these activities.
- 2006 – Replaced bags in kiln #2 & #3 and IAC scale dust collectors.
- 1964 to present – Ash Grove performs routine maintenance as required on the underground raw material conveyance system, which is used to transfer limestone to various areas of the Rivergate facility. Maintenance activities include inspecting the condition of conveyor belts and support structures, adding small amounts of grease for lubrication of the rollers, etc.

Based on the records reviewed for the Terminal facility, the following specific maintenance activities have occurred during the specified time period:

- 1994 to 1996 – Schulz Sanitation periodically pumped waste from septic tanks for disposal.
- 2007 to 2008 – Ash Grove implements a preventative maintenance plan including periodic inspections every six months to ensure proper operation of the stormwater drain filters, which are used to collect and remove solids from the stormwater prior to discharge to the Willamette River. If the filters are full, they can either be replaced or cleaned. Ash Grove commissioned River City Environmental to clean the drain filters during the initial construction of the North Terminal in 2006. The drain filters were replaced on July 7, 2008. Ash Grove will inspect and replace the filters as needed.

a. Types of materials used to clean/maintain this equipment/machinery

For information regarding materials used to clean and maintain equipment, refer to the material list included in the response to Question No. 21, as well as the MSDSs included in the response to Question No. 33. The typical uses of materials used to clean and maintain equipment are described in general terms in the response to Question No. 21. MSDSs are provided in Appendix 33 for materials, including solvents, greases, and lubricating oils, which are currently and were historically used on-site at the Rivergate and Terminal facilities. Based on the records reviewed and interviews with Ash Grove personnel, these historical and current MSDSs provide the most comprehensive available inventory of materials used at the Rivergate and Terminal facilities for the maintenance and cleaning of equipment and machinery.

b. Monthly or annual quantity of each such material used

Average quantities of materials used to clean and maintain equipment at both the Rivergate and Terminal facilities are provided in the tables for the response to Question No. 21

c. Types of materials spilled in Respondent's operations
d. Materials used to clean up those spills
e. Methods used to clean up those spills
f. Where the material used to clean spills were disposed of

Subparts c through f of Question No. 34 request information regarding material spillage at the Rivergate and Terminal facilities. For information regarding specific incidents of spills, refer to the responses to Question Nos. 62, 63, and 67. For information regarding the handling of routine spills at the facilities, refer to the SPCC plans for each facility included in the response to Question No. 19.

35. Describe the methods used to clean up spills of liquid or solid materials during Respondent's operation.

The SPCC plans provided in the response to Question No. 19 provide a description of the methods used to clean up spills of liquids and solid materials at both the Rivergate and Terminal facilities. Spills, releases, and activities responding to those events are detailed in the response to Question Nos. 62 and 67.

36. For each type of waste (including by-products) from Respondent's operations, including but not limited to all liquids, sludges, and solids, provide the following information:

a. its physical state;
b. its nature and chemical composition;
c. its color;
d. its odor;
e. the approximate monthly and annual volumes of each type of waste (using such measurements as gallons, cubic yards, pounds, etc.); and
f. the dates (beginning & ending) during which each type of waste was produced by Respondent's operations.

See Table 36-1 for the response to this Question for the Rivergate facility. See Table 36-2 for the response to this Question for the Terminal facility. Unless otherwise specified, the color and odor of each material is normal.

TABLE 36-1. RIVERGATE WASTE MATERIALS

Material	Physical State	Nature and Chemical Composition	Approximate Monthly and Annual Volumes	Dates of Waste Production
General Trash	Solid	Food and office wastes	Not measured by the facility.	From start-up of plant to the present.
Neutralized Chemicals from Laboratory	Liquid	Neutralized chemicals used in laboratory analyses	Small amounts as needed.	From start-up of plant to the present.
Sewage	Liquid/Solid	Sewage	According to sewer bills, prior to kiln shutdown in 2006, 2,100 cubic feet/month. After kiln shutdown in 2006, 1,1,00 cubic feet/month.	From start-up of plant to the present.

TABLE 36-1. RIVERGATE WASTE MATERIALS (CONT'D)

Material	Physical State	Nature and Chemical Composition	Approximate Monthly and Annual Volumes	Dates of Waste Production
Wood Waste	Solid	Wood	Unknown	From start-up of plant to the present.
Landscaping wastes	Solid	Organic yard debris	1 cubic yard / month into trash bin and 2 cubic yards per year transported to American Composting.	From start-up of plant to the present.
Process Residue (waste lime, waste hydrate)	Solid	Calcium Carbonate, Calcium Oxide, Calcium Hydroxide	In 1983, waste lime from kiln was estimated to be produced at a rate of 150 to 200 tons per year. In 1982, 691 tons of hydrate tailings were produced. In 1983, 1,204 tons of hydrate tailings were produced.[54]	Generated as a waste during early operation. Sold as product since 1986.
Baghouse Dust	Solid	Calcium Carbonate, Calcium Oxide, Calcium Hydroxide	Produced 1,697.87 tons in 1982 and 2,261 tons in 1983.[55]	Generated as a waste during early operation. Sold as product since 1986.
Settling Basin Sediment	Solid-Liquid Mixture	Water w/limestone based products	Variable amounts produced during cleaning as needed.	From start-up of plant to the present.
Steel and metal scraps	Solid	metals	Approximately 80,000 lbs per year.	From start-up of plant to the present.
Batteries	Solid	Used batteries	Approximately 50 lbs per year.	From start-up of plant to present.
Mercury Thermostats/ Switches	Solid/Liquid	Mercury containing thermostats and switches	One time event as part of ODEQ mercury disposal program. Total equipment weight of approximately 2.63 lbs.	Disposed of in 2008.
Oily Rags	Solid	Used in maintenance activities	Approximately 10,000 rags per year.	From start-up of plant to present.
Oily Spill Material/Solids (Cleanup Material)	Solid/Liquid	Cleanup materials, spill pads, grease sweep, etc.	Approximately 200 gallons per year.	From start-up of plant to the present.

[54] These are representative quantities prior to the initial operation of the Ag Mills in 1985. After the Ag Mills began operation, the materials have been used in the production process.

[55] Ibid.

TABLE 36-1. RIVERGATE WASTE MATERIALS (CONT'D)

Material	Physical State	Nature and Chemical Composition	Approximate Monthly and Annual Volumes	Dates of Waste Production
Floor Dry/Absorbent Materials	Solid	Dry granules, absorbent pads	Approximately 300 gallons per year[56]	From start-up of plant to the present.
Asbestos containing materials	Solid	Siding & insulation materials	Occasional repairs and replacements over the years. Annual average – 5 sheets transite and 0.5 cubic yards of insulation type material.	Contained in various original plant construction materials removed from the site.
PCB oil and flush oil from transformers	Liquid	PCB oil and flush oil from PCB-containing transformer	One time event – 383.5 gallons of PCB oil and 383.5 gallons of flush oil.	Disposed of in 1988.
PCB capacitors	Solid	PCB capicitors	One time event – 1330 lbs of capacitors.	Disposed of in 1988.
Electronic Components	Solid	Electronic components for recycle	Approximately 1 4ftX4ft pallet/year.	Approximately 1990 to present.
Used Oil	Liquid	Used oil from equipment maintenance.	Approximately 360 gallons per year.	From start-up of plant to present.
Used Oil Filters	Solid/Liquid	Used oil filters from equipment maintenance	Approximately 50 gallons per year uncrushed.	From start-up of plant to present.
Used Grease	N/A	N/A	Used grease is accounted for in grease rags and spill pads.	From start-up of plant to the present.
Used Antifreeze	Liquid	Used Antifreeze from equipment maintenance	Approximately 40 gallons per year.	From start-up of plant to the present.
Used Parts Cleaner Solvent	Liquid	Used solvent	Approximately 25 Gallons per year.	From start-up of plant to the present.

[56] The quantity of absorbent materials disposed annual is an estimate from opertions prior to the decommissioning of the kilns in May 2006. Current generation of absorbent material is lower.

Table 36-1. Rivergate Waste Materials (cont'd)

Debris from oil tank cleaning	Solid/Liquid	Oily water, sludge	One time event 77,996 gallons to Cascade General, 11,066 gallons to Wasco County Landfill, 2802 gallons to a PSC disposal facility in Kent, WA facility.	Disposed of in 2005.
Dredged spoils	Solid/Liquid	Sand, silt, clay.	2465 tons in 2007 – from 14 years of accumulation. Unknown quantities from earlier events.	Disposed of in 2007.
Passenger tires and passenger tires with rims	Solid	Tires	One time disposal event in 2005 included 55 tires.	Disposed of in 2005.
Used Light Bulbs	Solid	Used Light bulbs	110 fluorescent tubes, 55 compact bulbs and 30 HID bulbs accumulated over four years.	Bulbs have been collected for recycling/disposal since 2002. To date, one recycling/disposal event occurred in 2006.

TABLE 36-2. TERMINAL WASTE MATERIALS

Material	Physical State	Nature and Chemical Composition	Approximate Monthly and Annual Volume	Dates of Waste Production
General trash	Solid	Food and office wastes	Not measured by the facility.	Start of operation of South Terminal in December 1994 to present.
Used Oil	Liquid	Petroleum base	Refer to response to Question No. 40 for quantity information.	Start of operation of South Terminal in December 1994 to present.
South Terminal Sewage	Solid-Liquid Mixture	Sewage waste	Monthly – 1,500 gallons; Annually – 18,000 gallons.	Start of operation of South Terminal in December 1994 to present.
Used Oil Filters	Solid	Metal filters	An average of one quarter of a 55 gallon drum per year.	Start of operation of South Terminal in December 1994 to present.
Used Baghouse Filter Bags	Solid	Polyester Felt	North Terminal: Upgrade of baghouse bags when rebuilding the North Terminal resulted in one-time disposal event of four tons of filter bags in 2006. South Terminal: Three baghouses, each containing approximately 200 bags, are in use at the South Terminal. Bags are replaced as needed approximately every two years.	North Terminal: One time disposal event in 2006. South Terminal: as needed, approximately every two years.
Concrete from Lab	Solid	Hardened concrete cylinders	Approximately 7.5 cubic feet per month.	Start of lab operations in 2001 to present.
Product Residue (including Concrete Debris, Soil and Dirt, Cement Dust)	Solid	Cement	Ten tons of material collected intermittently over the course of a year.	Start of operation of South Terminal in December 1994 to present.

TABLE 36-2 TERMINAL WASTE MATERIALS (CONT'D)

Material	Physical State	Nature and Chemical Composition	Approximate Monthly and Annual Volume	Dates of Waste Production
South Terminal Lab Wash Water	Solid-Liquid Mixture	Water, contains sand, gravel, small amounts of concrete, cement cement powder, and concrete additives.	Approximately 200 to 300 gallons of wash water is generated per month.	Start of lab operations in 2001 to present.
Cement from Single Ship	Solid	Cement	700-750 tons were disposed in 2007 as the result of an accident occurring during ship unloading.	Single event in 2007.
Paint Related Material[57]	Liquid	Paint and Related Materials	434 lbs in 2008. 250lbs in 2007.	One time event, material collected over the course of roughly 8 years.
Kay-Ray Gauge	Solid, Liquid Components	Level indicator which contains minor amount of Cesium-137.	This device was installed and used by the prior owner of the North Terminal and removed by Ash Grove in August 2006.	Single event in 2006.
Truck Wash Sediment	Solid-Liquid Mixture	Road sediment	10.6 tons were removed from the facility during the last cleaning.	Start of operation of south terminal in December 1994 to present.
Oily Water	Solid-Liquid Mixture	From hydraulic indexer unit.	Shipments from hose leak cleanup. Quantities disposed of include 4,460 lbs, 3,640 lbs, and 2,460 lbs.	There was an emergency cleanup in September 2007. In February 2008, additional cleanup occurred.
Creosoted Pilings	Solid	Creosote-treated wood pilings	21 pilings were removed during the initial construction of the South Terminal facility.	Single event in 1993-1994 timeframe.
Used Light Bulbs	Solid	Used light bulbs	110 fluorescent tubes, 55 compact bulbs and 30 HID bulbs accumulated over four years.	Bulbs have been collected for recycling/disposal since 2005. To date, one recycling/disposal event occurred in 2006.

[57] Ash Grove disposed of paint and paint related materials generated from a prior owner, this information in not included in this table. A description of this occurrence in provided in the response to Question No. 40.

TABLE 36-2. TERMINAL WASTE MATERIALS (CONT'D)

Material	Physical State	Nature and Chemical Composition	Approximate Monthly and Annual Volume	Dates of Waste Production
Small Batteries	Solid	Used batteries	Under Ash Grove's operation approximately 20 lbs per year are collected.	From 2005 to present.

37. Provide a schematic diagram that indicates which part of Respondent's operations generated each type of waste, including but not limited to wastes generated by cleaning and maintenance of equipment and machinery and wastes resulting from spills of liquid materials.

Rivergate: See Appendix 37 for a schematic diagram.

Terminal: See Appendix 37 for a schematic diagram.

38. Identify all individuals who currently have and those who have had responsibility for Respondent's environmental matters (e.g. responsibility for the disposal, treatment, storage, recycling, or sale of Respondent's wastes). Also provide each individual's job title, duties, dates performing those duties, supervisors for those duties, current position or the date of the individual's resignation, and the nature of the information possessed by such individuals concerning Respondent's waste management.

Terminal: See Appendix 38 for a list of individuals.

Rivergate: See Appendix 38 for a list of individuals.

39. For each type of waste describe Respondent's contracts, agreements, or other arrangements for its disposal, treatment, or recycling.

Contracts, agreements, or other arrangements for waste disposal, treatment, or recycling are described in the response to Question No. 40.

40. Provide copies of such contracts and other documents reflecting such agreements or arrangements, Including, but not limited to the following:

- **a. state where Respondent sent each type of its waste for disposal, treatment, or recycling;**
- **b. identify all entities and individuals who picked up waste from Respondent or who otherwise transported the waste away from Respondent's operations (these companies and individuals shall be called "Waste Carriers" for purposes of this Information Request);**

c. **if Respondent transported any of its wastes away from its operations, please so indicate;**
d. **for each type of waste specify which Waste Carrier picked it up;**
e. **indicate the ultimate disposal/recycling/treatment location for each type of waste;**
f. **provide all documents indicating the ultimate disposal/recycling/treatment location for each type of waste; and**
g. **state the basis for and provide any documents supporting the answer to the previous question.**

In EPA's April 8, 2008 response to suggestions for the 104(e) information request (specifically, the response to Question No. 40, labeled as Question No. 38 in EPA's response), Ms. Lori Houck-Cora states that:

> *Respondents do not need to provide duplicative documents or information. If requested information is contained in an annual report or other comprehensive report for a particular time period, providing copies of the reports are sufficient for documenting the ultimate disposal/recycling/treatment location for each type of waste. If reports are not available, providing representative documents for each different disposal arrangement for each type of waste is sufficient.*

Following this guidance, Appendix 40 includes representative documents for each different disposal arrangement for each type of waste. See Table 40-1 for the response to this Question for Rivergate. See Table 40-2 for the response to this Question for the Terminal facility.

TABLE 40-1. RIVERGATE WASTE DISPOSAL

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
Process Residue (waste lime, waste hydrate)	During early plant operation, this material was disposed in the Willamette River. Production fines were mixed with water discharged to settling basins, and eventually discharged to the river. This disposal practice took place under state permit until 1973 at which time a market for waste lime and waste hydrate was identified.	Willamette River	Ash Grove personnel disposed of the waste.
Baghouse Dust	During early plant operation, this material was disposed in the Willamette River. Baghouse dust was mixed with water, discharged to settling basins, and eventually discharged to the river. This disposal practice took place under state permit until 1973.	Willamette River	Ash Grove personnel disposed of the waste.
Process Residue (Waste lime, waste hydrate)	In August 1981, arranged to dispose 600-800 tons of production waste (hydrate tailings and kiln waste lime) via dump truck. In October 1984, arranged to dispose of 400 tons of production waste (hydrate tailings and kiln waste lime) three times per year. In November 1985, arranged to dispose of 400 tons of production waste (hydrate tailings and kiln waste lime) three times per year.	St. Johns Landfill Part of Metropolitan Service District 527 SW Hall St. Portland, OR 97201	Reviewed records and unable to identify third-party dump truck haulers.

TABLE 40-1. RIVERGATE WASTE DISPOSAL (CONT'D)

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
Baghouse Dust	In November 1987, arranged to dispose 1,500 lbs of baghouse waste (dust, dust collector bags) four times per year via company truck.	St. Johns Landfill Part of Metropolitan Service District 527 SW Hall St. Portland, OR 97201	Reviewed records and unable to identify third-party dump truck haulers.
Assorted waste (soil, dirt, grease, PCB less than 50 ppm, absorb-all, sand, limestone)	In December 1990, arranged to dispose of forty (40) 55-gallon drums.	St. Johns Landfill Part of Metropolitan Service District 527 SW Hall St. Portland, OR 97201	Unknown
Limestone Wash Water (used to wash unprocessed limestone at a triple-deck screen)	Until limestone washing ceased sometime between October 1973 and January 1974, limestone wash water passed through settling basins and, eventually, was discharged to the Willamette River.	Willamette River	Ash Grove personnel disposed of the waste.
Lime kiln cooling Water	Until approximately 1973, passed through settling basins and, eventually, was discharged to the Willamette River in quantities of approximately 15,000 gallons per day. According to Ash Grove personnel, this practice was stopped around 1973.	Willamette River	Ash Grove personnel disposed of the waste.
General trash	Waste Management, Inc. collects weekly.	Unknown	Waste Management Inc.
Waste Wood	Currently, materials other than food waste are put into a 20 yard dumpster and picked up when called.	Unknown	Waste Management Inc.
Landscaping waste	Landscaping waste is delivered by Ash Grove personnel to American Compost and Recycling.	American Compost and Recycling 9707 N. Columbia Blvd. 503-286-0886	N/A

TABLE 40-1. RIVERGATE WASTE DISPOSAL (CONT'D)

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
Steel and Stainless Steel Scraps, Metal Scraps	When the scrap dumpsters fill, Schnitzer Steel is called to dispose of the scrap.	Schnitzer Steel 12005 N Burgard Road Portland, OR 97203.	Schnitzer Steel
Floor dry, oil absorbent materials	Material is disposed when 55-gallon storage drum is full.	Oil Re-Refining 4150 N. Suttle Road Portland, OR 97217	Oil Re-refining
PCB transformer oil, flush oil, and PCB-containing capacitors	PCB transformer oil, flush oil, and PCB-containing capacitors were removed from the facility in 1988.	Eastern Electric 10831 E. Marginal Way S. Seattle, WA 98168	Eastern Electric Apparatus Repair Company, Inc. P.O. Box 105718 Atlanta, GA 30348-5718 206-767-9506
Asbestos-Containing Material	In February 1995, made arrangements to dispose of less than 10 cubic yards of asbestos-containing siding.	Hillsboro Landfill, Inc. 3205 S.E. Minter Bridge Road Hillsboro, OR 97123 503-640-9427	Unknown
	In May 1998, Keystone Contracting disposed of 6 double (DBL) 6 mil bags of Thermal System Insulation (TSI) asbestos materials.	Hillsboro Landfill, Inc. 3205 S.E. Minter Bridge Road Hillsboro, OR 97123 503-640-9427	Rob Walkenhauel Keystone Contracting Inc. 417 NW 209th St Ridgefield, WA 98642 360-887-0868
	In January 2005, Keystone Contracting disposed of the following asbestos-containing material: 1) 12 DBL 6 mil bags of pipe insulation, 2) 5 DBL 6 mil bundles of transite panels, 3) 1 DBL 6 mil bag of Cement Asbestos Board (CAB) panels.	Grabhorn Landfill 14930 SW Vandermost Road Beaverton, OR 97007 Wasco County Landfill 2550 Steele Road The Dalles, OR 97058 541-206-4082[58]	Tim Brusseau Kenny Johns Keystone Contracting Inc. 417 NW 209th St Ridgefield, WA 98642 360-887-0868
	In August 2005, Keystone Contracting disposed 16 6 mill double bundles of asbestos-containing transite siding (420 square feet and 4 cubic yards).	Grabhorn Landfill 14930 SW Vandermost Road Beaverton, OR 97007	Tim Brusseau Keystone Contracting Inc. 417 NW 209th St Ridgefield, WA 98642 360-887-0868

[58] According to Ash Grove personnel, non-friable material is disposed of at Grabhorn Landfill, and friable material is disposed of at Wasco County Landfill.

TABLE 40-1. RIVERGATE WASTE DISPOSAL (CONT'D)

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
Electronic Components	Ash Grove recycled a 4 ft x 4 ft pallet of electronic components.	TC Recycling 11749 NE Marx St. Portland, OR 97220 503-680-1798	Company truck
Batteries	Ash Grove recycles batteries at United Battery.	United Battery Systems Inc. 109 NE Columbia Blvd, Portland, OR	Batteries are transported by Ash Grove personnel.
Mercury Switches/Thermostats	As part of an ODEQ mercury disposal program, Ash Grove disposed of 2.63 lbs of equipment containing mercury switches and thermostats.	Metro Central Hazardous Waste 6161 NW 61st Avenue Portland, OR 97210	Company truck
Oily rags	Oily rags are picked up bi-monthly for cleaning by Aratex Services – this company is now Cintas.	Cintas 9045 N Ramsey Blvd. Portland, OR 97203	Aratex Services Cintas
Oily spill material/solids (clean-up material)	In March 2004, Fuel Processors picked up ten (10) 55 gallon drums	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
	In August 2004, Fuel Processors picked up 9 drums	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
	In May 2006, Fuel Processors picked up 12 drums	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
	In May 2007, Fuel Processors picked up 8 drums	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
	In September 2007, Fuel Processors picked up 5 drums	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.

TABLE 40-1. RIVERGATE WASTE DISPOSAL (CONT'D)

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
Used Oil	In March 2004, Fuel Processors picked up 1 drum	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
	In May 2007, Fuel Processors picked up 3 drums	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
	In September 2007, Fuel Processors picked up 6 drums	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
Used Oil Filters	In March 2004, Fuel Processors picked up 1 drum	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
	In August 2004, Fuel Processors picked up 1 drum	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
	In May 2007, Fuel Processors picked up 2 drums	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
	In September 2007, Fuel Processors picked up 1 drum	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
Used Antifreeze	In March 2004, Fuel Processors picked up 1 drum	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.
	In September 2007, Fuel Processors picked up 1 drum	ORRCO Oil Re-Refining Company 4150 N. Suttle Rd. Portland OR 97217	Fuel Processors Inc.

TABLE 40-1. RIVERGATE WASTE DISPOSAL (CONT'D)

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
Debris From Tank Cleaning	In 2005, waste materials generated during oil tank cleaning were shipped to several disposal locations. 11,066 gallons of waste was shipped to the Wasco County Landfill	Wasco County Landfill 2550 Steele Road The Dalles, OR 97058 541-206-4082	PSC 1806 Baker Way Loop Kelso , WA 98626
	In 2005, waste materials generated during oil tank cleaning were shipped to several disposal locations. 77,996 gallons was shipped to Cascade General.	Cascade General 5555 North Channel Avenue Portland, OR 97217	PSC
	In 2005, waste materials generated during oil tank cleaning were shipped to several disposal locations. 20 cubic yards of oily solids was transported by NRC Environmental to Burlington Environmental, a PSC disposal site.	Burlington Environmental 20245 77th Ave South Kent, WA	Jeff Walters NRC Environmental 800-290-1655
Dredge Spoils	Dredging and disposal invoice from Hickey Marine Enterprises Inc. for dredging at Ash Grove in 2007.	Wasco County Landfill The Dalles, OR	Hickey Marine Enterprises Inc.
Passenger Tires & Passenger Tires w/Rims	Delivered by Ash Grove Personnel	RB Recycling 8501 North Borthwick Ave. Portland, OR 97217	Ash Grove Personnel
Used light bulbs	Used light bulbs were picked up and recycled/disposed of by Veolia ES Technical Solutions.[59]	Waste Management Inc. 17629 Cedar Springs Lane Arlington, OR 97812	Veolia Environmental Services

[59] Ash Grove contracts with Veolia for recycling or disposal of used light bulbs. The choice of recycling or disposal is Veolia's. The documents in Appendix 40 is for one disposal event.

TABLE 40-2. TERMINAL DISPOSAL ARRANGEMENTS

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
General trash	General trash to be picked up once per week.	Unknown	Metropolitan Disposal and Recycling P.O. Box 11229 Portland, OR Followed by Waste Management
Used Oil	In September 1995, 120 gallons of used oil was used as fuel at Ash Grove's Rivergate facility.	Ash Grove's Rivergate Facility 13939 N. Rivergate Blvd. Portland, OR 97203	Bruce R. Geis SunWest Corporation P.O. Box 17008 Portland, OR 97217
	In December 1995, 364 gallons was collected by Spencer Environmental for reprocessing.	Spencer Environmental Vancouver, WA Plant 3000 Hidden Way #350, Vancouver, WA 98661	Spencer Environmental P.O. Box 5207 Oregon City, OR 97405-8207 503-655-0896
	In March 1996, 155 gallons was collected by Spencer Environmental for reprocessing.	Spencer Environmental Vancouver, WA Plant 3000 Hidden Way #350, Vancouver, WA 98661	Spencer Environmental P.O. Box 5207 Oregon City, OR 97405-8207 503-655-0896
	In early 1996, used oil was collected by Spencer Environmental). In May 1996, 150 gallons collected by Spencer Environmental for reprocessing.	Spencer Environmental Vancouver, WA Plant 3000 Hidden Way #350, Vancouver, WA 98661	Spencer Environmental P.O. Box 5207 Oregon City, OR 97405-8207 503-655-0896

TABLE 40-2. TERMINAL DISPOSAL ARRANGEMENTS (CONT'D)

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
South Terminal Sewage[60]	The holding tank is pumped monthly. During each pumping, 1,000 to 1,500 gallons of waste is removed.	Unknown	Schultz Sanitation DBA McInnis Ent. Ltd. Co. 10643 N.E. Simpson Portland, Oregon 97220
	The holding tank is pumped monthly. During each pumping, 1,000 to 1,500 gallons of waste is removed.	Unknown	River City Disposal and Recyling P.O. Box 30087 Portland, OR 97294 503-253-5656
Used Oil Filters	In early 1996, filters were picked up by Spencer Environmental for reprocessing.	Spencer Environmental Portland, OR Plant 6637 SE 100th Ave. Portland, OR	Spencer Environmental P.O. Box 5207 Oregon City, OR 97405-8207 503-655-0896
	Filters are stored in vendor drums and picked up by vendor. Appendix 40 contains representative documents from 2008 showing this disposal arrangement.	Oil Re-Refining Company 4150 N. Suttle Road Portland, OR 97217 503286-8352	Oil Re-Refining Company 4150 N. Suttle Road Portland, OR 97217 503286-8352
Used Baghouse Filter Bags	In August 2006, during a one time event as part of the renovation of the North Terminal, four tons of waste was picked up by Waste Management, Inc.	Hillsboro Landfill, Inc. 1205 SE Minter Bridge Road Hillsboro, OR 97123	Waste Management
Used Antifreeze	In early 1996, used antifreeze generated by the prior owner of the North Terminal facility was picked up by Spencer Environmental for reprocessing.	Spencer Environmental Portland, OR Plant 6637 S.E. 100th Ave. Portland, OR	Spencer Environmental P.O. Box 5207 Oregon City, OR 97405-8207 503-655-0896

[60] At the North Terminal, sewage is pumped to UPRR's sewage system. Ash Grove has no control over this system.

TABLE 40-2. TERMINAL DISPOSAL ARRANGEMENTS (CONT'D)

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
Process Residue	WasteExpress picked up process residue from the Terminal facility. Appendix 40 contains representative documents from 2000 showing this disposal arrangement.	Hillsboro Landfill, Inc. 1205 SE Minter Bridge Road Hillsboro, OR 97123	WasteXpress Environmental Services
	PSC picked up process residue from the Terminal facility. Appendix 40 contains a representative document from 2005 showing this disposal arrangement.	Hillsboro Landfill, Inc. 1205 SE Minter Bridge Road Hillsboro, OR 97123	PSC Environmental Services Group
	NRCES picked up process residue from the Terminal facility. Appendix 40 contains a representative document from 2006 showing this disposal arrangement.	Hillsboro Landfill, Inc. 1205 SE Minter Bridge Road Hillsboro, OR 97123	NRCES
	Columbia Metal Works (CMW) picked up process residue from the Terminal facility. Appendix 40 contains representative documents from 2007 and 2008 showing this disposal arrangement.	CMW facility	Columbia Metal Works, Inc. P.O. Box 61982 Vancouver, WA 98667
Cement from Single Ship	CMW cleaned cargo holds of a ship docked at the Terminal facility in May 2007 and transported and disposed of 700-750 tons of cement from a single accident.	CMW facility	Columbia Metal Works, Inc. P.O. Box 61982 Vancouver, WA 98667

TABLE 40-2. TERMINAL DISPOSAL ARRANGEMENTS (CONT'D)

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
Paint Related Material	Burlington picked up 55 gallons of paint-related materials in May 2006.	Burlington Environmental, Inc. 20245 77th Ave S Kent, WA 98032	Burlington Environmental, Inc. 253-383-3044
	In September 2007 and October 2007, Ash Grove delivered paint and paint thinner to Metro Central Hazardous Waste facility left by the prior owner of the North Terminal.	Metro Central Hazardous Waste 6161 NW 61st Ave. Portland, OR 97210 503-223-8133	Ash Grove personnel
Kay-Ray Gauge	In August 2006, Thermo Electron picked up old gauge.	Thermo Electron Corporation 1410 Gillingham Lane Sugar Land, TX 77478	Thermo Electron Corporation 800-437-7979
Truck Wash Sediment	Beginning in early 2000 to present, truck wash sediment has been removed from the settling basin as needed. Appendix 40 contains representative documents from 2005 and 2007 showing a disposal arrangement with Environmental Business Solutions for sediment disposal.	Hillsboro Landfill, Inc. 1205 SE Minter Bridge Road Hillsboro, OR 97123	Environmental Business Solutions 11954 NE Glisan #241 Portland, OR 97220 503-231-7605
	Beginning in early 2000 to present, truck wash sediment has been removed from the settling basin as needed. Appendix 40 contains representative documents from 2005 and 2007 showing a disposal arrangement with WasteXpress for sediment disposal.	Hillsboro Landfill, Inc. 1205 SE Minter Bridge Road Hillsboro, OR 97123	WasteXpress Environmental Services

TABLE 40-2. TERMINAL DISPOSAL ARRANGEMENTS (CONT'D)

Waste	Description of Disposal Arrangements	Disposal, Treatment, or Recycling Location	Waste Carriers
Oily Water	There was an emergency cleanup in September 2007. In February 2008, additional cleanup occurred. In September 2007, Jammies Environmental picked up 4,460 lbs of oily water. In February 2008, Jammies Environmental picked up 3,060 lbs and 2,460 lbs, of oily water on two occasions.	Pacific Power Vac 4530 NE 138th Ave Portland, OR 97230	Jason Harvel, Steven Nein Jammies Environmental 120 Industrial Way Longview, WA 98032

41. Describe all wastes disposed by Respondent into Respondent's drains including but not limited to:

a. the nature and chemical composition of each type of waste;
b. the dates on which those wastes were disposed;
c. the approximate quantity of those wastes disposed by month and year;
d. the location to which these wastes drained (e.g. septic system or storage tank at the Property, pre- treatment plant, Publicly Owned Treatment Works (POTW), etc.); and
e. whether and what pretreatment was provided.

Rivergate: The Rivergate facility has two primary sources of waste that are disposed in its drains. The primary source is sewage and domestic waste water. The second source, which represents a very small contribution to total material disposed of in Rivergate's drainage system, is neutralized laboratory chemicals. Drains are currently directed to the City of Portland POTW listed in the response to Question No. 42. Prior to approximately 2002, drains were directed to a septic system located on Rivergate's property. No pretreatment was applied to the sewage and domestic waste water.

Terminal: At the North Terminal, sewage and domestic wastewater drain to a septic system, which is located outside of Ash Grove's property and control. Ash Grove has no control over any pretreatment activities associated with this waste. The system has been in operation since Ash Grove acquired the North Terminal property on December 22, 2005 (recorded December 29, 2005) to the present. The septic system is located on UPRR's property.

At the South Terminal, sewage and domestic wastewater drain to the facility's holding tank, which is pumped monthly. According to records, approximately 1,000 to 1,500 gallons of waste is generated

each month. The holding tank has been in operation since Ash Grove acquired the South Terminal property on December 22, 1992 (deed recorded December 29, 1992) to the present.

42. Identify any sewage authority or treatment works to which Respondent's waste was sent.

Rivergate: Wastes from Rivergate are sent to a City of Portland POTW located on Columbia Blvd in Portland, OR.

Terminal: Sewage from the North Terminal is treated in UPRR's septic system, which is outside of Ash Grove's property and control. Sewage from the South Terminal is directed to a holding tank, which is pumped monthly. As such, no sewage authority or treatment works received wastes from the Terminal facility.

43. Describe all settling tank, septic system, or pretreatment system sludges or other treatment wastes resulting from Respondent's operations.

Rivergate: A septic system was in use at the Rivergate facility from the start of its operation in 1963 until approximately 2002, when the facility was connected to the POTW referenced in the response to Question No 42. According to Ash Grove personnel, the septic system did not need to be pumped for any reason during its operation. Solids deteriorated within the system and water was directed to the drainage field to infiltrate the ground.

Sediments have been removed from the various settling basins located on the Rivergate property. See the response to Question No. 16 for a description of the settling basins. Where possible, sediments removed from the basins are dried and used in processes at the facility.

Terminal: The treatment of sewage from the North Terminal facility is under the direction and control of UPRR. Ash Grove has no knowledge of septic system sludges or other treatment wastes from that system. At the South Terminal, sewage is pumped to a holding tank, which is pumped monthly. This waste is not treated prior to monthly pumping.

A treatment waste is generated in the truck wash system. Truck wash water is directed to a concrete settling basin to remove suspended solids before the water is adjusted for pH and then, when necessary, directed to the permitted discharge area to infiltrate the ground. The settled sediment is removed from the concrete settling basin when necessary. According to Ash Grove personnel, sediment is disposed approximately once each year. The response to Question No. 40 provides additional information regarding the disposal of this material.

44. If applicable, describe the facilities, processes and methods Respondent or Respondent's contractor used, and activities engaged in, either currently or in the past, related to ship building, retrofitting, maintenance or repair, including, but not limited to, dry-docking operations, tank cleaning, painting and re-powering.

Ash Grove did not have control of any activities related to ship building, retrofitting, maintenance or repair at either Rivergate or Terminal. Except as noted, this question is not applicable to Ash Grove's operations at Rivergate and Terminal.[61]

45. Describe any hazardous substances, wastes, or materials used or generated by the activities described in response to the previous Question and how these hazardous substances, materials and wastes were released or disposed of.

Ash Grove did not have control of any activities related to ship building, retrofitting, maintenance or repair at either Rivergate or Terminal. Therefore, this question is not applicable to Ash Grove's operations at Rivergate and Terminal.

46. Provide copies of any records you have in your possession, custody or control relative to the activities described in response to the previous two Questions.

Ash Grove did not have control and has not identified records of any activities related to ship building, retrofitting, maintenance or repair at either Rivergate or Terminal.

47. Describe any process or activity conducted on a Property identified in response to Question 4 involving the acquisition, manufacture, use, storage, handling, disposal or release or threatened release of polychlorinated biphenyl(s) ("PCB(s)") or PCB(s)-containing materials or liquids.

Rivergate: The earliest documents Ash Grove has located indicate that PCB containing transformers and capacitors were used at the Rivergate facility as early as 1979. Based on Ash Grove's review of records, the PCB-containing transformers and capacitors at the facility were replaced with non-PCB containing transformers and capacitors in 1988. Ash Grove contracted Eastern Electric Apparatus Repair Company, Inc. to properly dispose of the PCB-containing transformers and capacitors. The hazardous waste manifest and certificate of destruction indicate that the PCB containing transformers and capacitors were removed from the Rivergate facility by Eastern Electric Apparatus Repair Company, Inc. and were disposed by incineration at Rollins Environmental Services, Inc.'s Deer Park facility in Texas on November 18, 1988.

Ash Grove used on-specification (on-spec) and off-specification (off-spec) used oil to fire the kilns at the Rivergate facility. On-spec and off-spec oil are defined as used oil containing no more than 2 PPM and 49 PPM PCB, respectively. Ash Grove has two to three boxes of used oil records which indicate the PCB content of individual used oil deliveries. These records are not included in this response but will be provided upon request.

According to records, on-spec oil has been fired in the kilns from 1978 until the kilns were permanently decommissioned in May 2006. Off-spec oil has been fired in the kilns from 1988 until

[61] Ash Grove did conduct maintenance and general repairs of the boat used for business development stored in the boathouse at Rivergate. A description of these activities is included in the response to Question No. 23. No records regarding hazardous substances, wastes, or materials used or generated in conjunction with these activities were identified. Furthermore, facility personnel are not aware of any materials that were used or generated by these activities.

the kilns were permanently decommissioned in May 2006. Ash Grove's EPA identification number as an authorized off-spec used oil burner is ORD 027707256 per a notification provided by the EPA on June 17, 1988.

Ash Grove's review of records, including EPA's notification letter authorizing the burning of used oil, indicates Ash Grove burned used oil as the primary fuel in kilns from 1988 until 2006. From 1998 to 2006, Ash Grove used landfill gas from St. John's Landfill as the primary fuel in kilns and used the used oil as a secondary fuel. According to plant personnel, landfill gas alone was initially used unless production demanded the use of the kilns. When all three kilns were running, used oil was required as a supplement to landfill gas. Over time, as landfill gas production decreased, used oil was regularly required as a supplement to the landfill gas. Ash Grove stopped firing the kilns with used oil in May 2006, when the kilns were permanently decommissioned.

To the best of Ash Grove's information and belief, during the time that Ash Grove burned off-spec oil as fuel, there were two instances of oil shipments containing greater than 49 PPM PCB.

The first instance occurred in the late 1980s or early 1990s. No documentation of this incident could be located during the review of Ash Grove's records and current plant personnel do not have knowledge of additional information.

The second instance occurred in late 1997, when Ash Grove received five loads of off-spec used oil from a single supplier that exceeded the 49 PPM limit. The records provided by the supplier indicated a PCB level of less than 50 PPM; however, the additional testing required by Ash Grove's ACDP permit indicated the PCB level was greater than 50 PPM. Because of the time frame involved with the testing procedures, the off-spec used oil had been burned before Ash Grove received the testing results indicating an exceedance of the 49 PPM limit. The amount of used oil with a PCB concentration greater than 49 PPM was approximately 1% of the annual deliveries in 1997. Ash Grove has records of each shipment of oil with PCB content in excess of 49 PPM. These records are not included in this response but can be provided upon request.

The used oil was stored in a 425,000 gallon above ground insulated steel tank and a 25,000 gallon above ground insulated steel tank. The two tanks are equipped with ultrasonic level measurement equipment. The equipment was monitored in the kiln control room, which was manned 24 hours per day, seven days per week during used oil fuel use. The oil storage tanks were provided with secondary containment which consisted of a concrete pad surrounded by 5 feet high reinforced concrete walls designed to hold more than 425,000 gallons with a minimum of 6 inches of free board. The used oil was transferred to the kilns with the use of four 10 gpm pumps via 2 inch above ground pipelines.

The used oil, which was delivered by truck, was unloaded via 250 gpm truck mounted pump and transferred to the storage tanks through an above ground pipeline. Used oil unloading took place under a covered truck unloading station, equipped with a concrete containment pad sized to hold a spill from the largest compartment of an oil truck.

Terminal: To the best of Ash Grove's information and belief, no processes or activities at the Terminal facility involved the acquisition, manufacture, use, storage, handling, disposal, or release of any PCB(s) containing material or equipment during Ash Grove's ownership of the property.

48. For each process or activity identified in response to the previous question, describe the dates and duration of the activity or process and the quantity and type of PCB(s) or PCB(s) containing materials or liquids.

Rivergate: Ash Grove's review of annual equipment lists indicate PCB containing transformers and capacitors were used starting as early as 1979 until 1988, when the 21 PCB-containing transformers were replaced with non-PCB-containing transformers. A description of the disposal of the PCB-containing equipment can be found in the response to Question No. 47.

Regarding on-spec and off-spec used oil, see the response to Question 47.

Terminal: No activities or processes during Ash Grove's ownership of the property were identified in the response to Question No. 47.

49. For each process or activity identified in response to the previous two questions, identify the location of the process or activity on the property

Rivergate: Review of the annual equipment lists indicates transformers and capacitors were placed at various locations throughout the Rivergate facility. The annual equipment lists from 1979 to 1990, which indicate the location of each PCB containing and non-PCB containing transformer and capacitor at the Rivergate facility are included in Appendix 49 as reference.

As mentioned in the response to Question No. 47, the on-spec and off-spec used oil was stored in 2 tanks located in the tank farm area with capacities of 425,000 and 25,000 gallons. Drawings included in Appendix 49 show the location of the used oil storage tanks and the associated equipment.

Terminal: No activities or processes during Ash Grove's ownership of the property were identified in the response to Question No. 47.

50. Identify all federal, state and local authorities that regulated the owner or operator of each Property and/or interacted with the owner or operator, including all interactions and all contacts from agencies/departments that dealt with health and safety issues and/or environmental concerns.

A listing of the federal, state, and local authorities that regulated and/or interacted with Ash Grove (regarding the Rivergate and Terminal sites) are included in Appendix 50.

51. Provide copies of all documents associated with each occurrence associated with violations, citations, deficiencies, and/or accidents concerning each Property during the period being investigated related to health and safety issues and/or environmental concerns.

Question No. 51 requests copies of documentation associated with violations, citations, deficiencies, and/or accidents related to health and safety issues and/or environmental concerns at each Property during the time period being investigated. In EPA's April 8, 2008 response to suggestions for the 104(e) information request (specifically, the response to Question No. 51, labeled as Question No. 48 in EPA's response), Ms. Lori Houck-Cora states that:

> *The question is asking for a description of occurrences associated with violations, citations, deficiencies or accidents related to health and safety issues AND environmental concerns OR just environmental concerns. Meaning, only health and safety issues that also included some environmental concern needs to be described in the response to this question.*

Those health and safety issues that involve some type of environmental concern during Ash Grove's ownership and operation of the properties are included in the response to this Question. For purposes of this answer, Ash Grove defined the phrase, "violations, citations or deficiencies" to include determinations by agencies regarding an act or condition at one of the Properties. Table 51-1 and Table 51-2 identify the document and provide a brief description of the occurrence, and specify the type of occurrence (i.e., violation, citation, deficiency, and/or accident) for the Rivergate and Terminal facilities, respectively, and, to the extent reasonably possible, identify Ash Grove's response. Copies of the documents associated with each occurrence included in this response are provided in Appendix 51.

TABLE 51-1. OCCURRENCES OF VIOLATIONS, CITATIONS, DEFICIENCIES, AND/OR ACCIDENTS AT RIVERGATE

Date of Occurrence	Description of Occurrence
October 15, 1970	Internal correspondence indicates that a reference to Ash Grove appeared in a Federal river inspection for the practice of discharging waste hydrate and quicklime into the water, although the practice was approved by the state and "probably improves water quality."
June 5, 1973	Ash Grove was cited for a violation of the rules of the Columbia Willamette Air Pollution Authority on June 4, 1973 in regards to the visible emission from the number two cooler exhaust caused by a process upset. A notice of violation was issued for excessive visible emissions for 25 ¾ minutes from the number two cooler exhaust stack ranging in density from 20-100% opacity. Correspondence with ODEQ indicates that Ash Grove agreed to submit engineering plans to address the startup/upset emissions problem on permanent basis. In 1974, Ash Grove installed a quicklime dust control system for upset conditions. Ash Grove also agreed to promptly report future upset conditions that cause excess emissions to the authority. In addition, the letter notes that excessive amounts of dust were being generated by various vehicular traffic; however, no enforcement actions were taken by ODEQ on this issue. Internal correspondence indicates that Ash Grove used additional hoses and sprinklers to minimize dust in response to this agency correspondence.
January 2, 1986	A load of special waste (e.g., hydrate tailings and waste lime from kilns) disposed under Metropolitan Service District (Metro) Permit 715 caused a minor fire in nearby solid waste at St. John's Landfill, which is outside of the Investigation Area. Permit No. 715 was subsequently revoked by Metro.
August 25, 1986	Excessive noise emissions (screeching noise that runs periodically 12 to 48 hours at a time, and often during night time hours) was reported. Documentation indicates that ODEQ would be evaluating noise emissions from the Rivergate facility to determine compliance with Oregon's noise pollution standards. No enforcement actions were taken by ODEQ.
1987	Bureau of Labor Statistics Log and Summary of Occupational Injuries and Illnesses - In 1987, the following injuries with environmental implications were reported: February 18, 1987-lime dust in eyes; March 6, 1987-steel in left eye; April 18, 1987-Lime dust in right eye; September 24, 1987-burns caused by lime; December 1, 1987-lime burns on both wrists.

TABLE 51-1. OCCURRENCES OF VIOLATIONS, CITATIONS, DEFICIENCIES, AND/OR ACCIDENTS AT RIVERGATE (CONT'D)

Date of Occurrence	Description of Occurrence
1988	In 1988, the following injuries with environmental implications occurred: January 27, 1988-lime dust in eye; September 9, 1989-rust and dirt particles fell into eyes; September 15, 1988-struck on the shoulders by large amount of buildup from scrubber; November 30, 1988-"congested [sic] large amount of hydrate"
October 27, 1989	ODEQ source inspection form noted that the annual report was not submitted on time, thus Ash Grove was not in compliance with certain monitoring and reporting requirements. According to the source inspection report, the annual report was due on January 15, 1989, but was received on May 1, 1989.
November 17, 1989	ODEQ source inspection form noted that Ash Grove was not in compliance with fugitive emission requirements due to the purging of a line while kiln #2 was out of oil, causing smoke emissions. In addition, slight dust emissions from the hydrate dust collector were observed. Based on records reviewed, no enforcement actions were taken by ODEQ on this issue.
1990	In 1990, the following injuries with environmental implications occurred: January 8, 1990-lime dust in eye, March 13, 1990-lime dust in eye.
1990	Following an inspection conducted by EPA pursuant to Section 11 of the Toxics Substance Control Act (TSCA) on June 14, 1990, Ash Grove was cited for certain monitoring and record keeping violations of 40 Code of Federal Regulations (CFR) § 761 regarding electrical transformers. As a result of these violations, Ash Grove was issued a $24,000 penalty by the EPA. The penalty was reduced to $18,000 after Ash Grove provided documentation of the disposal of one PCB transformer and 21 PCB capacitors. Ash Grove paid the remainder of the penalty to resolve the violation.
1991	Monthly First aid reports with environmental implications for 1991: January 25, 1991-lime dust in eye, February 5, 1991-lime dust in eye.
1993	Accidents with environmental implications that occurred in 1993: February 17, 1993-irritant in eye; June 9, 1993-dust in eye, causing burn to eye.

TABLE 51-1. OCCURRENCES OF VIOLATIONS, CITATIONS, DEFICIENCIES, AND/OR ACCIDENTS AT RIVERGATE (CONT'D)

Date of Occurrence	Description of Occurrence
1994	Accidents with environmental implications that occurred in 1994: June 21, 1994-dust in eye, September 12, 1994-lime in eye. If Ash Grove locates additional responsive records not provided with this response, they will be provided to EPA in a supplemental response. Ash Grove began reporting to Mine Safety and Health Administration (MSHA) in 1989, and MSHA inspections began in 1994.
February 12, 1997	Oregon Department of State Police sent Ash Grove a warning of potential noncompliance notice and proposed penalty if the "1996-97 Hazardous Substance Information Survey" (as required by the Oregon Community Right-to-Know reporting requirements) was not submitted by March 1, 1997. A completed survey was submitted to the Oregon Department of State Police prior to the due date (the completed survey is dated February 18, 1997).
May 22, 1997	City of Portland, Oregon Bureau of Buildings sent a letter to Ash Grove to notify them that a complaint regarding industrial/commercial noise for back-up beepers and other noises had been received, and that this complaint suggested that a violation of the Portland Noise Ordinance may have occurred.
June 18. 1997	ODEQ sent Ash Grove a Notice of Noncompliance due to the annual Plant Site Emission Limit (PSEL) being exceeded for NOx and VOC. Per ODEQ, Ash Grove took the appropriate steps to correct the violation by revising the emission factors used to determine the plant site emission limit.
March 17, 1998	Ash Grove failed to submit an analysis report for microbiological contaminants (coliform) for the water system (supply or groundwater well) for 1998. A notification was received from the Multnomah County Health Department. Immediately after receiving this notification, Ash Grove sampled its groundwater well and sent the sample to a laboratory for testing. A copy of the results from this testing were included in a March 25, 1998 letter to the Multnomah County Health Department.
October 22, 1998	During a sanitary hazard inspection conducted by the Multnomah County Health Department, the following deficiencies were detected: [62] 1. Ash Grove lacked a written coliform sampling plan, resampling plan, and procedures; 2. Ash Grove lacked a maintenance plan, flushing schedule, storage tank inspection, and annual cleaning; and Ash Grove failed to test for chlorine residual and maintain a log. Following this sanitary hazard inspection, Ash Grove developed and implemented a written coliform sampling plan to rectify the deficiencies noted.

[62] The well water is not used for drinking at the facility. However, the water is used for washing in sinks and wash basins. As such, coliform testing is required.

TABLE 51-1. OCCURRENCES OF VIOLATIONS, CITATIONS, DEFICIENCIES, AND/OR ACCIDENTS AT RIVERGATE (CONT'D)

Date of Occurrence	Description of Occurrence
January 22, 2003	Ash Grove failed to submit an analysis report for microbiological contaminants (coliform) for the water system for the fourth quarter of 2002. A notification was received from the Oregon Department of Human Services, Health Services Division. Based on a review of Ash Grove's records, a water sample was collected on October 4, 2002 and tested for coliform. The results of this sampling were received by the Oregon Department of Human Services on January 30, 2003.
July 21, 2004	Ash Grove failed to submit an analysis report for microbiological contaminants (coliform) for the water system for the second quarter of 2004. A notification was received from the Oregon Department of Human Services Health Services Division. Based on a review of Ash Grove's records, a water sample was collected on April 9, 2004 and tested for coliform. The results of this sampling were received by the Oregon Department of Human Services on August 13, 2004.

TABLE 51-2. OCCURRENCES OF VIOLATIONS, CITATIONS, DEFICIENCIES, AND/OR ACCIDENTS AT TERMINAL

Date of Occurrence	Description of Occurrence
September 3, 1996	Occurrence of fugitive dust from truck unloading operations. According to report, the driver was having difficulties with the product line plugging. Ash Grove concluded that the problem was related to the truck and not to Terminal facility equipment. Ash Grove reported this incident to ODEQ and notified Gresham Transfer that if a similar condition occurred that may result in an emission, the driver would be informed that he would not be allowed to unload at the Terminal until the condition is corrected.
February 12, 1997	Oregon Department of State Police sent Ash Grove a warning of potential noncompliance notice and proposed penalty if the "1996-97 Hazardous Substance Information Survey" (as required by the Oregon Community Right-to-Know reporting requirements) was not submitted by the due date. According to records identified during the review process, the survey was submitted on February 14, 1997, which is before the March 1, 2007 due date indicated by the notice sent by the Oregon Department of State Police.
January 14, 2008	Post-inspection letter from the City of Portland Environmental Services to Ash Grove with stormwater inspection results. Minor deficiencies in the plan were identified, and recommendations provided. Since receipt of this letter, Ash Grove has cleaned out the permitted discharge area, and is in the process of planting vegetation.

TABLE 51-2. OCCURRENCES OF VIOLATIONS, CITATIONS, DEFICIENCIES, AND/OR ACCIDENTS AT TERMINAL (CONT'D)

Date of Occurrence	Description of Occurrence
March 5, 2008	Letter from ODEQ regarding pH, oil, and grease limitation exceedances in wash water discharges. This correspondence is designated as a 'warning letter', and indicates that ODEQ does not intend to take formal enforcement action at this time. Ash Grove reviewed its stormwater management procedures, and subsequent test results indicated compliance with pH, oil, and grease limits.

52. Provide a list of all local, state, and federal environmental permits ever issued to the owner or operator on each Property (e.g. RCRA permits, NPDES permits, etc). Please provide a copy of each federal and state permit, and the applications for each permit, ever issued to the owner or operator on each Property.

Using its best professional judgment, Ash Grove has interpreted this request to include environmental permits that have unique expiration dates, issue dates, and/or permit numbers. Ash Grove considered permits of the same type (e.g., NPDES permit, ACDP permit, etc.) with different expiration dates, issue dates, and permit numbers to be separate permits for the purposes of responding to this request.

Local, state, and federal environmental permits issued to the Rivergate facility are summarized in Table 52-1. Permits issued to the North Terminal are summarized in Table 52-2, while those permits issued to South Terminal are summarized in Table 52-3. Copies of each permit and the corresponding applications are included in Appendix 52.

TABLE 52-1. LOCAL, STATE, AND FEDERAL PERMITS ISSUED TO RIVERGATE FACILITY

Type of Permit	Permit Number (If available)	Issue Date	Other Date[63]	Expiration Date	Notes
Temporary Waste Discharge Permit	Permit No. TP-203	12/28/1967		12/31/1968	Issued by Oregon State Sanitary Authority
Waste Discharge Permit	Permit No. 233	7/26/1968		3/31/1973	Water and sanitary sewer discharges issued by Oregon State Sanitary Authority
Temporary Air Contaminant Discharge Permit (ACDP)		6/29/1973		12/31/1973	Issued due to ACDP requirement taking effect on July 1.
Waste Discharge Permit	Permit No. 1514	7/16/1973		1/3/1977	Issued by ODEQ
NPDES Waste Discharge Permit	Permit No. 1524-J	10/31/1973		1/3/1977	Issued by ODEQ, includes federal requirements of NPDES program
ACDP	Permit No. 26-1891	1/4/1974		6/30/1978	Permit No. 26-1891, Application No. 48
NPDES Waste Discharge Permit	Permit No. 2582J	7/12/1977		1/31/1982	Outfall #1
Prevention of Significant Deterioration (PSD) Permit for Construction of Third Lime Kiln	PSD Permit No. PSD-X-77-04	10/26/1977			
ACDP	Permit No. 26-1891	9/11/1978		7/1/1983	Application No. 1332
Approval of Request to Modify PSD Permit	PSD Permit No. PSD-X-77-04		9/23/1980		PSD Permit No. PSD-X-77-04
Boiler/Pressure Vessel Permit to Operate			7/1/1981	7/1/1983	Permits to operate boilers

[63] If no issue or expiration date could be located on the document, any other date identified from the document (e.g., date of signature, application date, received by date) is used in this column.

TABLE 52-1. LOCAL, STATE, AND FEDERAL PERMITS ISSUED TO RIVERGATE FACILITY (CONT'D)

Type of Permit	Permit Number (If available)	Issue Date	Other Date[64]	Expiration Date	Notes
Approval to Dispose of Special Waste	Permit Nos. include 715, 1253, 2721	Issuance dates include 8/20/1981, 11/17/1984, 11/14/1985, 12/14/1987, 12/17/1990			Issued by Metropolitan Disposal District for the disposal of various wastes at the St. Johns Landfill
NPDES Permit	Permit No. 3523-J	6/18/1982		4/30/1987	Covers Outfall #1
ACDP	Permit No. 26-1891	1/3/1983		7/1/1983	Application No. 5067, Modification
ACDP	Permit No. 26-1891	7/30/1985		7/1/1988	Application No. 11215
NPDES Permit	Permit No. 100303	3/27/1987		3/31/1992	Covers outfall #1
ACDP	Permit No. 26-1891,	7/1/1987		7/1/1988	Permit No. 26-1891, Addendum No. 1
Underground Storage Tank Program Temporary Permit	Permit No. EGH	7/7/1988			Temporary permit for gasoline tank ID No. 1. According to the temporary permit conditions, this permit remains effective until it is terminated, suspended, revoked, modified, or expires. As there is no expiration date, the temporary permit would remain effective until the Department issues a final permit.[65]

[64] If no issue or expiration date could be located on the document, any other date identified from the document (e.g., date of signature, application date, received by date) is used in this column.

[65] Based on Ash Grove's documentation, tank ID No. 1 was removed in late 1989. A final permit was not identified for this underground storage tank.

TABLE 52-1. LOCAL, STATE, AND FEDERAL PERMITS ISSUED TO RIVERGATE FACILITY (CONT'D)

Type of Permit	Permit Number (If available)	Issue Date	Other Date[66]	Expiration Date	Notes
Underground Storage Tank Program Temporary Permit	Permit No. EGJ	7/7/1988			Temporary permit for gasoline tank ID No. 2. According to the temporary permit conditions, this permit remains effective until it is terminated, suspended, revoked, modified, or expires. As there is no expiration date, the temporary permit would remain effective until the Department issues a final permit.[67]
ACDP	Permit No. 26-1891	1/25/1989		7/1/1993	Application No. 11996
Department of the Army Corps of Engineers Permit for Utility crossing		2/13/1989		2/28/1992	Authorization to place a natural gas pipeline under the Willamette River
Underground Storage Tank Program Temporary Permit	BAAGG	3/2/1990			Temporary permit for tank ID No. 3. According to the temporary permit conditions, this permit remains effective until it is terminated, suspended, revoked, modified, or expires. As there is no expiration date, the temporary permit would remain effective until the Department issues a final permit.
ACDP	Permit No. 26-1891,	12/30/1990		7/1/1993	Addendum No. A
Army Corps of Engineers Regional Permit	Permit No. 071-OYA-1-009429	1/8/1992		1/31/1997	Authorization to perform maintenance dredging
NDPES Waste Discharge Permit	Permit No. 100865	3/19/1992		3/31/1997	Covers outfall #1

[66] If no issue or expiration date could be located on the document, any other date identified from the document (e.g., date of signature, application date, received by date) is used in this column.

[67] Based on Ash Grove's documentation, tank ID No. 2 was removed in late 1989. A final permit was not identified for this underground storage tank.

TABLE 52-1. LOCAL, STATE, AND FEDERAL PERMITS ISSUED TO RIVERGATE FACILITY (CONT'D)

Type of Permit	Permit Number (If available)	Issue Date	Other Date[68]	Expiration Date	Notes
DSL Material Removal Permit	Permit No. 7058	2/10/1993		2/10/1994	Authorizes dredging
Boiler/Pressure Vessel Permit to Operate				7/1/1993	Permits to operate boilers
DSL Material Removal Permit	Permit No. 7058	3/10/1994		3/10/1999	Authorizes dredging
ACDP	Permit No. 26-1891	9/14/1995		7/1/1998	Application No. 014851
Underground Storage Tank Program Temporary Permit	Permit No. BAAGG	2/11/1997			Modification of permit for tank ID No. 3 (550 gallon gasoline tank)
NPDES Waste Discharge Permit	Permit No. 101478	4/25/1997		3/31/2002	Covers Outfall #1
Short Term Permit		7/30/1997		9/28/1997	Testing of Roller Mill #4
General Permit Water Pollution	Permit No. 1000	8/6/1997		6/30/2002	Process wastewater and stormwater
ACDP	Permit No. 26-1891	9/2/1997		7/1/2003	Application No. 16045
General Permit Water Pollution	Permit No. 1700B	3/5/1998		1/31/2003	General permit only
Air Contaminant Discharge Special Letter Permit	Permit No. 26-1891	3/15/1998		5/14/1998	Testing period for landfill gas combustion.
General Permit Registration Certificate to Operate Underground Storage Tank	Registration Certificate No. 26-2979-1998-OPER	12/5/1998			Registration indicates that Ash Grove subject to general permit to operate an underground storage tank pursuant to Oregon Administrative Rules (OAR) 340-150-0163 for tank ID No. 3. This general permit appears to replace Temporary Permit No. BAAGG for tank ID No. 3.
DSL Material Removal Permit	Permit No. 7058	3/11/1999		3/11/2004	Authorizes dredging
ACDP	Permit No. 26-1891, Addendum 1	7/28/2000		7/1/2003	Addendum 1
ACDP		10/15/2001		7/1/2003	Permit No. 26-1891, Addendum Number C
NPDES Permit	Permit No. 102465	2/28/2002		12/31/2004	Covers Outfall #1

[68] If no issue or expiration date could be located on the document, any other date identified from the document (e.g., date of signature, application date, received by date) is used in this column.

TABLE 52-1. LOCAL, STATE, AND FEDERAL PERMITS ISSUED TO RIVERGATE FACILITY (CONT'D)

Type of Permit	Permit Number (If available)	Issue Date	Other Date[69]	Expiration Date	Notes
Standard Air Contaminant	Permit No. 26-1891	2/17/2004		7/1/2008	
DSL Material Removal Permit	Permit No. 7058	3/8/2004		3/1/2009	Authorizes dredging
DSL Material Removal Permit	Permit No. 7058 Modified			3/11/2004	Authorizes dredging
NPDES Permit	Permit No. 102465	2/14/2005		1/31/2010	Covers Outfall #1
Department of the Army Corps of Engineers Permit	Permit No. 200500236	11/9/2006			Approval of annual maintenance dredging.

TABLE 52-2. LOCAL, STATE, AND FEDERAL PERMITS ISSUED TO NORTH TERMINAL

Type of Permit	Permit Number (If available)	Issue Date	Expiration Date	Notes
NPDES Permit	Permit No. 1200-Z	6/26/2002	6/30/2007	Permit originally issued to CGAC, but transferred to Ash Grove January 10, 2006 for remainder of term
Simple ACDP[70]	Permit No. 26-0146	7/16/2006	6/1/2011	Application No. 021705
NPDES Permit	Permit No. 1200-Z	8/23/2006	6/30/2012	Permit No. 1200-Z, File No. 107213

[69] If no issue or expiration date could be located on the document, any other date identified from the document (e.g., date of signature, application date, received by date) is used in this column.

[70] This permit includes both the North and South Terminals.

TABLE 52-3. LOCAL, STATE, AND FEDERAL PERMITS ISSUED TO SOUTH TERMINAL

Type of Permit	Permit Number (If available)	Issue Date	Expiration Date	Notes
Renewed Removal/Fill Permit	Permit No. 6596	5/12/1993	5/13/1996	Removal/Fill permit for the development of a rail and barge terminal.
Army Corps of Engineers Permit for Relocating Barge Moorage	Permit No. 92-169	7/22/1993		Modification. Relocating barge moorage.
Department of Army Corps of Engineers Permit	Permit No. 92-169		6/30/1995	Permit to allow construction of a barge moorage facility.
City of Portland, Bureau of Planning Permit	Permit No. BLD97-05016	1997		Fill permit for river bank stabilization
General Water Pollution Control Facilities Permit	Permit No. 1700-B	3/23/2002	1/31/2003	
General Water Pollution Control	Permit No. 1700-B	11/7/2007	10/31/2017	

53. Did the owner or operator ever file a Hazardous Waste Activity Notification under the RCRA? If so, provide a copy of such notification.

Ash Grove filed Hazardous Waste Activity Notifications related to its use of off-specification fuel oil at the Rivergate facility on the following dates:

- The initial notification for the Rivergate facility was filed on April 1, 1988.
- An updated notification regarding EPA identification numbers ORD027627181 and ORD027707256 was submitted to ODEQ on December 9, 1991. This update was submitted so that records could be updated in response to the merger of Ash Grove Cement West Inc. into its parent company Ash Grove Cement Company effective January 1, 1992. Ash Grove West's identification number, ORD027707256, was transferred to Ash Grove as part of the merger.

A copy of each notification is included in Appendix 53. Based on the records review conducted in response to EPA's 104(e) information request, and to the best of Ash Grove's information and belief, no additional Hazardous Waste Activity Notifications were identified since that time for Rivergate. Furthermore, no Hazardous Waste Activity Notifications were identified for the Terminal facility.

54. Did the owner or operator's facility on each Property ever have "interim status" under the RCRA? If so, and the facility does not currently have interim status; describe the circumstances under which the facility lost interim status.

Ash Grove did not have interim status under the RCRA at either Rivergate or Terminal. Therefore, this question is not applicable to Ash Grove's operations at Rivergate and Terminal.

55. Provide all RCRA Identification Numbers issued to Respondent by EPA or a state for Respondent's operations.

Terminal: RCRA Site ID Number ORQ000026246

Rivergate: RCRA Site ID Number ORD027707256

56. Identify all federal offices to which Respondent has sent or filed hazardous substance or hazardous waste information. State the years during which such information was sent/filed.

The response to Question No. 56 is provided in Table 56-1.

TABLE 56-1. FEDERAL OFFICES TO WHICH RESPONDENT SENT OR FILED HAZARDOUS SUBSTANCE OR HAZARDOUS WASTE INFORMATION

Federal Office	Current Address	Years during which hazardous substance or hazardous waste information was sent/filed
U.S. EPA Region X Waste Management Branch	1200 Sixth Avenue Seattle, WA 98101	1988, 1990, 1991, 1998

57. Identify all state offices to which Respondent has sent or filed hazardous substance or hazardous waste information. State the years during which such information was sent/filed.

The response to Question No. 57 is provided in Table 57-1.

TABLE 57-1. STATE OFFICES TO WHICH RESPONDENT SENT OR FILED HAZARDOUS SUBSTANCE OR HAZARDOUS WASTE INFORMATION

State Office	Current Address	Years during which hazardous substance or hazardous waste information was sent/filed[71]
Office of the State Fire Marshal	4760 Portland Rd, NE Suite 26 Salem, OR 97305	1989 – present
Oregon Dept. of Revenue	P.O. Box 14100 Salem, OR 97309	1990 – present
Oregon Dept. of Environmental Quality Accounting Section	811 SW 6th Ave Portland, OR 97204	2006
Oregon Dept. of Environmental Quality Toxics Use/Waste Reduction Assistance Program	811 SW 6th Ave Portland, OR 97204	2002
Oregon Dept. of Human Services Public Health Division Environmental Public Health Radiation Protection Services	800 NE Oregon St. Portland, OR 97232	1994 and prior[72], 2006[73]
Oregon Dept. of Environmental Quality Hazardous Waste Program	811 SW 6th Ave Portland, OR 97204	1991 – present

[71] In cases where documentation seems to be submitted annually for a number of consecutive years, it was assumed that the appropriate submission occurred each year, although documentation was not necessarily located for every single year. Ash Grove has no information to suggest that appropriate submissions were not submitted as required.

[72] Two Cesium-137 sealed source radiation devices were present in one of Rivergate's calcimatic kilns until 1994 when the devices were properly disposed and the Radioactive Materials License for the devices was terminated. To the best of Ash Grove's knowledge, these devices were present from the time the kiln was installed in 1978 until their disposal in 1994.

[73] Upon acquiring the North Terminal property, Ash Grove acquired a Cesium-137, 100 millicurie, sealed source radiation device used as a continuous level gauge measurement system. Ash Grove submitted information regarding this device to the appropriate authorities to: (1) transfer the Radioactive Materials License from the prior owner to Ash Grove and subsequently (2) to terminate the license and report that the radioactive device had been properly disposed.

58. List all federal and state environmental laws and regulations under which the Respondent has reported to federal or state government. Provide copies of each report made (required under environmental laws and regulations under which the Respondent has reported to federal or state government) If only oral reporting was required under environmental regulations, identify the federal and state offices to which such report was made.

Ash Grove was subject to numerous state and federal regulations that required various forms of reporting over the course of its operations to date.[74] The response to this question number is limited to environmental regulations. Non-environmental regulations, such as safety reports, are omitted from this listing. A list of those regulations identified as a result of the records review conducted in response to EPA's 104(e) information request is presented in Table 58-1. Copies of each report identified during the document review process are included in Appendix 58.

TABLE 58-1. LAWS AND REGULATIONS REQUIRING REPORTING FROM ASH GROVE'S RIVERGATE AND TERMINAL FACILITIES

Law or Regulation[75]	Type of Report(s) Required
49 CFR Part 191	Annual Report for Gas Transmission and Gathering Systems
Clean Water Act	NPDES Permit
Emergency Planning and Community Right-to-Know Act (EPCRA) 311,312,313	Toxic Release Inventories
Oregon Revised Statutes (ORS) 468A, OAR 340-14-005 through 340-14-050, OAR 340-216-0010 through 340-216-0100	Air Contaminant Discharge Permit Annual and Semi-annual Reports, AQ Upset Log, Excess Emissions Report, and Total Assessable Emissions Report, Registration Verification Report for ODEQ, Source Testing
OAR 210-0205 through OAR 210-0250	Construction or Modification Notices
Oregon's Toxics Use Reduction and Hazardous Waste Reduction Act	Confirmation of exemption from reduction plan requirements
Safe Drinking Water Act	Source Water Assessment Report
Section 9002 of the RCRA	Notification of Underground Storage Tanks
U.S. Code Title 13	Pollution Abatement Costs and Expenditures
40 CFR Part 280 Subpart H	Financial Assurance
40 CFR Part 112	Spill Prevention Control and Countermeasure Plan
ORS 468.050	Discharge Monitoring Report (wash water)
ORS 537.765 and OAR 690-240-095	Monitoring well report

[74] Environmental personnel at Ash Grove are aware of a single incident of oral reporting which was associated with temporary excess emissions associated with the malfunction of newly installed equipment during the startup of the North Terminal facility in April 2007.

[75] This list of regulations is limited to federal and state environmental regulations and does not include the following: injury/safety reports, building inspections, city laws, the manufacturing energy consumption survey required under the Federal Energy Administration Act of 1974, etc..

TABLE 58-1. LAWS AND REGULATIONS REQUIRING REPORTING FROM ASH GROVE'S RIVERGATE AND TERMINAL FACILITIES (CONT'D)

Law or Regulation[76]	Type of Report(s) Required
Oregon Community Right to Know and Protection Act	Oregon State Fire Marshall Hazardous Substance Employer Survey
Public Water Systems, Department of Human Services OREGON DRINKING WATER PROGRAM	Microbiological analysis report for well samples
Section 7(a)(2) of the Endangered Species Act	Consultation between federal agencies and U.S. Fish and Wildlife Service (FWS) / National Marine Fisheries Service (NMFS) to ensure that proposed dredging actions not likely to threaten endangered species.[77]

To the best of Ash Grove's information and belief, reports made by Ash Grove under these regulations can be found in Appendix 58. Within the electronic version of Appendix 58, the files are sorted into folders based on the subject matter of the reports enclosed.

59. Provide a copy of any registrations, notifications, inspections or reports required by the Toxic Substances Control Act, 15 USC § 2601 et seq., or state law, to be maintained or submitted to any government agency, including fire marshal(s), relating to PCB(s) or PCB(s) containing materials or liquids on any Property identified in response to Question No. 4.

Rivergate: Hazardous Waste Notifications submitted to the EPA are included in the response to Question No. 53. Hazardous Substance Information Surveys submitted to the Oregon State Fire Marshal are included in the response to Question No. 58. Documents pertaining to this question number which are not included in Appendix 53 and Appendix 58 are included in Appendix 59 as reference. A review of records indicates that EPA conducted an inspection of the Rivergate facility pursuant to Section 11 of the TSCA on June 14, 1990. Ash Grove was cited for certain monitoring and record keeping violations of 40 CFR § 761 regarding electrical transformers.

Terminal: To the best of Ash Grove's information and belief, the Terminal facility did not submit any registrations, notifications, inspections or reports relating to PCBs or PCB containing material or liquids during Ash Grove's ownership of the property.

60. Has Respondent or Respondent's contractors, lessees, tenants, or agents ever contacted, provided notice to, or made a report to the Oregon Department of State Lands ("DSL") or any

[76] This list of regulations is limited to federal and state environmental regulations and does not include the following: injury/safety reports, building inspections, city laws, the manufacturing energy consumption survey required under the Federal Energy Administration Act of 1974, etc..

[77] While Ash Grove is not required to report directly to FWS/NMFS under this regulation, federal agencies such as the Army Corps of Engineers are required to provide information regarding Ash Grove's dredging activities under this provision.

other state agency concerning an incident, accident, spill, release, or other event involving Respondent's leased state aquatic lands? If so, describe each incident, accident, spill, release, or other event and provide copies of all communications between Respondent or its agents and DSL or the other state agency and all documents that were exchanged between Respondent, its agents and DSL or other state agency.

Rivergate: To the best of Ash Grove's information and belief, the correspondence made to DSL with regard to Lease ML-743/LE-5146 requested the termination of the lease and verified the removal of the boat house in March 2000. Copies of this correspondence can be found in Appendix 12.

Terminal:
Submerged and Submersible Land Lease ML-10587: To the best of Ash Grove's information and belief there have been no reports made to the DSL under this lease.

61. Describe all notice or reporting requirements to DSL that you had under an aquatic lands lease or state law or regulation regarding incidents affecting, or activities or operations occurring on leased aquatic lands. Include the nature of the matter required to be reported and the office or official to whom the notice or report went to. Provide copies of all such notices or reports.

Rivergate: To the best of Ash Grove's information and belief, there were no specific reporting requirements to the DSL under the submerged and submersible land leases for the Rivergate facility regarding incidents affecting, or activities or operations occurring on leased aquatic lands.

Terminal: To the best of Ash Grove's information and belief, there were no specific reporting requirements to the DSL under the submerged and submersible land leases for the Terminal facility regarding incidents affecting, or activities or operations occurring on leased aquatic lands.

62. Identify all leaks, spills, or releases into the environment of any waste, including petroleum, hazardous substances, pollutants, or contaminants, that have occurred at or from each Property, which includes any aquatic lands owned or leased by Respondent. In addition, identify, and provide copies of any documents regarding:

- **a. when such releases occurred;**
- **b. how the releases occurred (e.g., when the substances were being stored, delivered by a vendor, transported or transferred (to or from any tanks, drums, barrels, or recovery units), and treated);**
- **c. the amount of each hazardous substances, pollutants, or contaminants so released;**
- **d. where such releases occurred;**
- **e. any and all activities undertaken in response to each such release or threatened release, including the notification of any agencies or governmental units about the release;**

f. any and all investigations of the circumstances, nature, extent or location of each release or threatened release including, the results of any soil, water (ground and surface), or air testing undertaken;

g. all persons with information relating to these releases; and

h. list all local, state, or federal departments or agencies notified of the release, if applicable.

Table 62-1 identifies leaks, spills, and releases of the materials identified by Question No. 62 at the Rivergate facility. Table 62-2 identifies leaks, spills, and releases of the materials identified by Question No. 62 at the Terminal. Copies of relevant documents are included in Appendix 62.

Please note that the response is limited to spills, leaks or releases into the environment of any waste including petroleum, hazardous substances, pollutants, or contaminants from the Property occurring during the time period that Ash Grove owned the Terminal site. The response to Question No. 9 describes the investigations of the Terminal undertaken prior to Ash Grove's acquisition of each property.

Also note that Ash Grove has included responses to this Questions that may not meet the definition of "hazardous substances, pollutants, or contaminants" under the specific circumstances of each event. Ash Grove does not admit that these events meet the definition, nor does it waive the right to assert arguments or defenses against that determination.

TABLE 62-1. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT RIVERGATE

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
January 24, 1964	Release	Soil	Heavy rains caused drainage problems and soil erosion on the river end of the south drainage ditch, where a large volume of dirt was washed into the river.	George Merz - Ash Grove
June 5, 1973	Release	Excess Emissions	On June 4, 1973 a process upset caused visible emissions from the number two cooler exhaust. Visible emissions ranging in density from 20-100% opacity were observed for 25 ¾ minutes from the number two cooler exhaust stack. Correspondence with ODEQ indicates that Ash Grove agreed to submit engineering plans to address the startup/upset emissions problem on permanent basis. In 1974, Ash Grove installed a quicklime dust control system for upset conditions. Ash Grove also agreed to promptly report future upset conditions that cause excess emissions to the authority.	Tom Bispham and James R. Close –Willamette Air Pollution Authority William A. Kistler – Ash Grove Wayne Hanson – ODEQ Columbia-Willamette Region
1985 – 1990	Release	Dust (PM)	Upset log record of equipment blowing dust (PM) and the repair actions taken in 1990.	Bruce R. Hazel – Ash Grove
June 6, 1989	Release	Various Pollutants	An explosion occurred during the startup of a kiln. The explosion did extensive damage to the kiln. Kiln explosion due to trying to ignite the burners with insufficient temperature or lighting tools.	William A. Kistler, Ivan A. Taylor, Jim Post, and Dick Cooke – Ash Grove

TABLE 62-1. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT RIVERGATE (CONT.)

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
November 17, 1989	Release	Excess Emissions	ODEQ source inspection form noted that Ash Grove was not in compliance with fugitive emission requirements due to the purging of a line while kiln #2 was out of oil, causing smoke emissions. The documentation indicates that Ash Grove was to submit a corrective action plan to resolve this issue. In addition, slight dust emissions from the hydrate dust collector were observed. Based on records reviewed, no enforcement actions were taken by ODEQ.	George Yun – ODEQ Richard A. Gable – Ash Grove
1990	Release	Dust (PM)	Complaint about dust on vehicles, which was due to emptying the dust collector. According to correspondence, Ash Grove believes the cause of this dust to be the handling and loading of 1/8" quicklime, as the dust collector used to control this operation was of a 1964 vintage. Ash Grove indicated that they would accelerate the redesign of the system to upgrade the dust collector and mitigate the fugitive dust problem.	Bruce Baker – Consolidated Metro, Inc. Albert Collinet – Ash Grove
1991	Release	Dust (PM)	Upset log record of equipment blowing dust (PM) and the repair actions taken in 1991.	Bruce R. Hazel – Ash Grove
June 11, 1992	Spill	Limestone Rock	ODEQ investigated a complaint regarding spillage on the dock and determined it was limestone rock.	William A. Kistler – Ash Grove

TABLE 62-1. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT RIVERGATE (CONT.)

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
1992	Release	Dust (PM)	Upset log record of equipment blowing dust (PM) and the repair action taken in 1992.	Bruce R. Hazel – Ash Grove
1978 to 1986	Discharge	Water/Diesel Fuel Mixture	According to Ash Grove personnel, standard operating procedures in place from 1978 to 1986 required that the 25,000 gallon tank be drained periodically to remove water and sediment.[78] Sediment removal was necessary to prevent the contamination of mobile equipment. Current Ash Grove personnel are not aware of the frequency or volume of these maintenance activities.	William A. Kistler – Ash Grove Erick Anderson – PBS Environmental
January 19, 1994	Release	Lime Dust	Lime dust was reported by a neighboring company. Ash Grove worked with ODEQ to mitigate the dust.	Doug Hale, Al Collinet – Ash Grove Emie Wimister and James Garver – Consolidated Metro, Inc.
1994	Release	Dust (PM)	Upset log record of equipment blowing dust (PM) and the repair action taken in 1994.	Bruce R. Hazel – Ash Grove

[78] Based on interviews with facility personnel, from 1978 to 1986, the tank was believed to have been in diesel service and was used to fuel mobile equipment. The maintenance activity described was required only during the period that the tank was in diesel service.

TABLE 62-1. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT RIVERGATE (CONT.)

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
05/1996 – 06/1996	Release	Dust (PM)	Emission notification and complaint report for dust on vehicles. Ash Grove investigated and discovered the dust emissions resulted from the emptying of a holding tank for the dust collector. As of June 17, Ash Grove stopped emptying of the holding tank until a pneumatic conveyor was installed. According to interviews with plant personnel, this conveyor was installed shortly after the complaints in May and June 1996.	Albert A. Collinet and Ken Rone – Ash Grove Bruce Baker – Consolidated Metro, Inc. Adam Richard – James River Corporation Western Transportation
1997	Release	Dust (PM)	Upset log record of equipment blowing dust (PM) and the repair action taken in 1994.	Bruce R. Hazel – Ash Grove

TABLE 62-1. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT RIVERGATE (CONT.)

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
March 27, 1998	Leak	Water and Possible Trace Amounts of Lime	Complaint concerning water discharge from the kilns spilling onto a neighboring property. At the time of this event, Ash Grove was directing process water to the drainage ditch as a result of a period of heavy rain. Water spilled onto the neighboring property when the side of the ditch was eroded. Corrective action on the Ash Grove site included fortifying the kiln buttress blocks, and adding additional pumps on the line. On the neighboring property, Ash Grove removed trace amounts of lime which remained following evaporation and laid down a layer of rocks for aesthetics. ODEQ determined that since steps were taken to minimize the reoccurrence, and neighborly concerns were taken care of, and since material was not discharged into the Willamette River, this was not a reportable issue.	Gary Wright, Glenn Dollar, Robert Vantuyl, Ken Rone, and Walter Greer, - Ash Grove

TABLE 62-1. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT RIVERGATE (CONT.)

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
July 13, 2000	Release	Dust (PM)	Malfunction of the rotary valve in the kiln department caused dust particles on neighboring vehicles, dust in warehouse and warehoused items. Other sources of fugitive emissions throughout the facility were also reported to contribute to dust emissions. Rotary valve repair work was immediately initiated following the malfunction. In addition, material conveyor practices were altered to reduce dust emissions.	Adam Richard – Ft. James Corporation Gary Wright and Glenn Dollar – Ash Grove
September 13, 2000	Release	Dust (PM)	Short-term upset condition associated with maintenance activities on a Kiln #1 Dust Collector resulted in visible opacity.	Glenn Dollar – Ash Grove George Yun - ODEQ

TABLE 62-1. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT RIVERGATE (CONT.)

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
January 25, 2002	Release	Dust (PM)	Excess emissions log: The oil flow rate to kiln was inconsistent and a buildup of material in the lines released and provided excessive oil flow to the kiln. Corrective action taken by installing new filter devices, talking with kiln personnel and ongoing training, along with the upgrade of operating controls and equipment.	Kathy Amidon - ODEQ
January 13, 2003	Release	Dust (PM)	Ash Grove letter to employees for complaint about dust on neighboring vehicles. No known cause of dust.	Gary Wright – Ash Grove
March 15, 2004	Release	Dust (PM)	The kiln department experienced problems with oil flow. The bottleneck in fuel flow was removed, but the subsequent increased flow resulted in emissions of 50% opacity that extended for approximately one minute and then were brought under control by kiln operations. Kiln operators noticed the increased flow and immediately lowered the damper.	Kathy Amidon – ODEQ Glenn Dollar – Ash Grove

TABLE 62-1. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT RIVERGATE (CONT.)

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
March 15, 2004	Release	Dust (PM)	Kiln #1 was brought into production and the kiln fuel was inconsistent resulting in variable flow. Kiln #1 baghouse was the source for the excess emissions. Supervisor shut kiln down upon noticing the excess emissions event.	Kathy Amidon – ODEQ Glenn Dollar – Ash Grove

TABLE 62-2. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT TERMINAL

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
September 3, 1996	Release	Dust (PM)	Product discharge line of pneumatic bulk truck tank was not operating correctly. The truck driver was ordered to shut down the loading equipment and to correct the problem. A letter written to the truck company stated that if "a similar condition recurs which may result in an emission, the driver will be informed he cannot unload" at Terminal until the problem is corrected.	Stanley A. Webb – Ash Grove

TABLE 62-2. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT TERMINAL (CONT.)

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
March 15, 2001	Spill	Oil	Soils in the area around the concrete containment unit housing the hydraulically operated power units used to move railcars (i.e., rail indexers) were contaminated with hydraulic oil partially as a result of equipment leaks. Per an investigation report, the soil test results do "not necessarily indicate that the contamination was a result of the leaking car moving equipment but could exist at these levels throughout the entire floodplain area because of another offsite source." To mitigate Ash Grove's potential contribution to the hydrocarbon contamination, Ash Grove sealed observed holes in the indexer containment unit. In addition, an 800 gallon poly tank was attached to the containment unit to collect the stormwater/oil mixture.	John Hone – Ash Grove Arthur Max - Environmental Business Solutions, Inc.

TABLE 62-2. SUMMARY OF LEAKS, SPILLS OR RELEASES OF ANY WASTE (INCLUDING PETROLEUM), HAZARDOUS SUBSTANCE, POLLUTANTS, OR CONTAMINANTS INTO THE ENVIRONMENT AT TERMINAL (CONT.)

Date of Occurrence	Type of Release: Spill, Leak, Release	Waste, Hazardous Substance, Pollutant, or Contaminant	Description of Occurrence	Individuals with Information Relating to Release
April 12, 2007	Release	Cement dust	A release occurred during initial startup of the facility when a leak was sprung in the airslide (a type of conveying chute). The airslide ruptured because a valve was not in the open position. The system was immediately shut down and the leak was fixed. The leak lasted approximately one minute.	Kathy Amidon – ODEQ Glenn Dollar – Ash Grove
March 5, 2008	Release	Truck Wash Water Contamination	Letter from ODEQ regarding two pH limitation exceedances and one oil and grease limitation exceedance in 2007 truck wash water discharges. This correspondence is designated as a 'warning letter', and indicates that ODEQ does not intend to take formal enforcement action at this time. Ash Grove reviewed its stormwater management procedures, and subsequent test results indicated compliance with pH, oil, and grease limits. These test results are included in Appendix 62.	John Hone – Ash Grove Tom Rosetta – ODEQ

63. Was there ever a spill, leak, release or discharge of waste, including petroleum, or hazardous substances, pollutant or contaminant into any subsurface disposal system or floor drain inside or under a building on the Property? If the answer to the preceding question is anything but an unqualified "no," identify:

a. where the disposal system or drain was located;
b. when the disposal system or drain was installed;
c. whether the disposal system or drain was connected to pipes;
d. where such pipes were located and emptied;
e. when such pipes were installed;
f. how and when such pipes were replaced, or repaired; and
g. whether such pipes ever leaked or in any way released waste or hazardous substances into the environment.

Spills, leaks, releases or discharges of waste, including petroleum, hazardous substances, pollutants or contaminants have been listed in response to Question No. 62 and Question No. 67. At the Rivergate and Terminal facilities, domestic waste water and general sewage are regularly disposed of down facility drains. At the Rivergate facility, small amounts of neutralized laboratory wastes are also regularly disposed of down facility drains. Laboratory wash water generated at the South Terminal laboratory is collected in a 125-gallon poly tank located in the lab. This wash water is transported to the South Terminal truck wash system for pH adjustment.

To the best of Ash Grove's information and belief, with the exception of the aforementioned materials, it appears that leaks, releases or discharges of waste, including petroleum, hazardous substances, pollutants or contaminants into a subsurface disposal system or floor drain have not occurred inside or under a building at either Ash Grove site.

64. Has any contaminated soil ever been excavated or removed from the Property? Unless the answer to the preceding question is anything besides an unequivocal "no", identify and provide copies of any documents regarding:

a. amount of soil excavated;
b. location of excavation presented on a map or aerial photograph;
c. manner and place of disposal and/or storage of excavated soil;
d. dates of soil excavation;
e. identity of persons who excavated or removed the soil, if other than a contractor for Respondent;
f. reason for soil excavation;
g. whether the excavation or removed soil contained hazardous substances, pollutants or contaminants, including petroleum, what constituents the soil contained, and why the soil contained such constituents;
h. all analyses or tests and results of analyses of the soil that was removed from the Property;
i. all analyses or tests and results of analyses of the excavated area after the soil was removed from the Property; and

j. all persons, including contractors, with information about (a) through (i) of this request.

Table 64-1 identifies and summarizes documents related to the excavation or removal of contaminated soil at the Rivergate facility under Ash Grove's ownership, as requested by Question No. 64. Table 64-2 identifies and summarizes documents related to the excavation or removal of contaminated soil at the Terminal facility under Ash Grove's ownership. Relevant documentation is included in Appendix 64.

TABLE 64-1. SUMMARY OF EXCAVATION OR REMOVAL OF CONTAMINATED SOIL AT RIVERGATE

Date of Excavation [79]	Excavation Location, Amount, and Disposal	Reason for Soil Removal	Contaminants and Means of Contamination	Analyses and Test Results of Soil Removed and Excavated Area After Soil Removal	Persons with Information
7/12/2007-7/17/2007	2,565.41 tons of river sediment excavated near conveyor system and at upstream and downstream ends of berth. Dredge material disposed at Wasco County Landfill, The Dalles, Oregon.[80]	Maintenance dredging to maintain safe access and berthing conditions for vessels off-loading material to the conveyor system	Residual limestone from Ash Grove's off-loading operations Detectable quantities of High Polynuclear Aromatic Hydrocarbons (HPAHs), Total (Dichloro-Diphenyl-Trichloroethane) DDT and Total PCBs. There is no evidence to suggest that Ash Grove released these contaminants to the Willamette River. Sediment test results likely the result of existing river contamination.	Sediment sampling at barge berth conducted in June 2005 to support regulatory agency review of dredging project. Sampling report included in Appendix 64. River sediment not retested following dredge project.	Glenn Dollar – Ash Grove Hickey Marine Enterprises, Inc. Jerry Ramsden – Parsons Brinkerhoff Reece Vernon and Dean Large – Waste Connections Judy Linton and Thomas O'Donovan – U.S. Army Corps of Engineers

[79] Based on interviews with plant personnel, dredging has occurred several times at the Rivergate facility over its years of operation. A document indicates that some dredging occurred at Rivergate in 1993 (See Appendix 64.) However, documentation related to quantity, disposal location, etc. was only found for the 2007 dredging project described in this table.

[80] The permit issued by the U.S. Army Corps of Engineers for this dredging project, dated November 9, 2006, includes a diagram of the anticipated dredging location. A copy of this permit is included in Appendix 52.

TABLE 64-2. SUMMARY OF EXCAVATION OR REMOVAL OF CONTAMINATED SOIL AT TERMINAL

Date of Excavation	Excavation Location, Amount, and Disposal	Reason for Soil Removal	Contaminants and Means of Contamination	Analyses and Test Results of Soil Removed and Excavated Area After Soil Removal	Persons with Information
7/11/2001	10 cubic yards excavated at south-end of railcar unloading silo by EBS. Neither documents reviewed nor interviews with personnel identify the location at which these soils were disposed.	To address leaks from hydraulically operated power units used to move railcars (i.e., rail indexers).	Soils in the area around the hydraulic rail indexer concrete containment unit were contaminated with hydraulic oil as a result of the operation of the equipment, although there is a report suggesting that there may also be some area-wide petroleum impacts throughout the floodplain in this vicinity .	Petroleum hydrocarbons present following soil removal. The EBS test report, included in Appendix 64, states the test results do "not necessarily indicate that the contamination was a result of the leaking car moving equipment but could exist at these levels throughout the entire floodplain area because of another offsite source." To mitigate Ash Grove's potential contribution to the hydrocarbon contamination, Ash Grove sealed the holes in the indexer containment unit. In addition, an 800 gallon poly tank was attached to the containment unit to collect the stormwater/oil mixture.	John Hone, Bob Vantuyl, Fran Streitman, Ken Rone, Hedrik Voldbaek, Gerald Brown, Eileen Flink, Bill Siemering – Ash Grove Arthur Marx, Jim Hinkley - Environmental Business Solutions J. Mark Morford – Stoel Rives

65. Have you ever tested the groundwater under your Property? If so, please provide copies of all data, analysis, and reports generated from such testing.

Rivergate: Four wells exist at the Rivergate property. One well is a source of domestic water. Three monitoring wells are located near the tank farm area. Documentation related to groundwater testing at the Rivergate facility is identified in Table 65-1. Copies of these data, analyses, and reports are provided in Appendix 65.

TABLE 65-1. DOCUMENTATION OF GROUNDWATER TESTING AT RIVERGATE

Date	Description
9/19/1969	Well water laboratory analysis stating that water conforms with standards of purity
2/26/1993	Report about monitoring well installation and sampling near above ground oil tanks
2/26/1993	Report about monitoring well installation and sampling near above ground oil tanks
2/26/1993	Report about monitoring well installation and sampling near above ground oil tanks
6/11/1993	Report of findings for groundwater sampling from monitoring wells near above ground oil tanks
6/11/1993	Report of findings for groundwater sampling from monitoring wells near above ground oil tanks
11/28/1994	Turbidity/settleable solids results for groundwater sample
12/5/1994	Turbidity/settleable solids/pH results for groundwater sample
5/14/1998	Proposal from PBS Environmental for providing groundwater sampling, includes initial sampling results
6/22/1998	Report of findings for groundwater sampling from PBS Environmental
12/24/1998	Results of testing for bacteria and nitrate in groundwater
1998	Messages about test results
3/8/1999	Results of testing for nitrate in groundwater
6/2/1999	Results of testing for nitrate in groundwater
7/2000	Source water assessment report – contains an inventory of potential sources of contaminants and an assessment of the relative threat that they pose to the water system
8/30/2000	Results of testing for bacteria and nitrate in groundwater
10/16/2000	Results of testing for microbial contamination in groundwater
1/18/2001	Results of testing for bacteria and nitrate in groundwater
4/19/2001	Results of testing for bacteria and nitrate in groundwater
7/20/2001	Results of testing for nitrate in groundwater
10/25/2001	Results of testing for bacteria and nitrate in groundwater
2/13/2002	Results of testing for bacteria and nitrate in groundwater
4/24/2002	Results of testing for bacteria and nitrate in groundwater

TABLE 65-1. DOCUMENTATION OF GROUNDWATER TESTING AT RIVERGATE (CONT'D)

Date	Description
7/23/2002	Results of testing for bacteria and nitrate in groundwater
10/17/2002	Results of testing for bacteria and nitrate in groundwater
1/30/2003	Results of testing for bacteria and nitrate in groundwater
4/11/2003	Results of testing for bacteria and nitrate in groundwater
7/10/2003	Results of testing for bacteria and nitrate in groundwater
1/29/2004	Results of testing for bacteria and nitrate in groundwater
4/20/2004	Results of testing for bacteria and nitrate in groundwater
7/27/2004	Results of testing for bacteria and nitrate in groundwater
11/2/2004	Results of testing for bacteria and nitrate in groundwater
2/1/2005	Results of testing for bacteria and nitrate in groundwater
5/17/2005	Results of testing for nitrate in groundwater
7/29/2005	Results of testing for bacteria and nitrate in groundwater
10/18/2005	Routine testing for bacterial testing nitrite, and nitrate in groundwater
2/2/2006	Results of testing for bacteria and nitrate in groundwater
5/12/2006	Results of testing for bacteria and nitrate in groundwater
7/8/2006	Chlorine and bacteria test results on Ash Grove water sample
7/12/2006	Results of testing for nitrate in groundwater
9/27/2006	Proposal to test groundwater monitoring wells – mentions prior test results
10/12/2006	Results of testing for chlorine and bacteria in groundwater
10/16/2006	Results of testing for nitrate in groundwater
10/20/2006	Results of tests on groundwater samples from three monitoring wells
10/30/2006	Report of findings for groundwater sampling from monitoring wells near above ground oil tanks
12/04/2006	Report of findings for groundwater sampling from monitoring wells near above ground oil tanks
1/12/2007	Results of testing for chlorine and bacteria in groundwater
1/29/2007	Results of testing for nitrate in groundwater
4/21/2007	Results of testing for chlorine and bacteria in groundwater
4/24/2007	Results of testing for nitrate in groundwater
7/6/2007	Results of testing for chlorine and bacteria in groundwater
7/17/2007	Results of testing for nitrate in groundwater
10/4/2007	Results of testing for chlorine and bacteria in groundwater
10/6/2007	Results of testing for nitrate in groundwater
1/9/2008	Results of testing for chlorine and bacteria in groundwater

Terminal: Ash Grove uses potable water from the water tank on UPRR's Albina Yard. UPRR is provided with potable water by the City of Portland. Based on a review of historical documentation at the Terminal facility and interviews with facility personnel, groundwater is not and has not used for domestic purposes at the site during Ash Grove's ownership. No analytical groundwater data is

available for Terminal. Ash Grove is not aware of spills or releases at the Terminal which would have resulted in an impact to the quality of groundwater during Ash Grove's ownership of the property, and does not know of any information to the contrary. Site assessments indicate that USTs were present at the North Terminal facility prior to Ash Grove's acquisition of the property on December 22, 2005 (recorded December 29, 2005). According to a preliminary site assessment conducted by CH2M Hill for CGAC in March 2000, there is no evidence that USTs formerly present at the site had releases or impacted soil or groundwater. As a result, there are no known impacts from USTs formerly located at the facility.

66. Have you treated, pumped, or taken any kind of response action on groundwater under your Property? Unless the answer to the preceding question is anything besides an unequivocal "no", identify and provide copies of any documents regarding:

a. reason for groundwater action;
b. whether the groundwater contained hazardous substances, pollutants or contaminants, including petroleum, what constituents the groundwater contained, and why the groundwater contained such constituents;
c. all analyses or tests and results of analyses of the groundwater;
d. if the groundwater action has been completed, describe the basis for ending the groundwater action; and
e. all persons, including contractors, with information about (a) through (c) of this request.

Ash Grove Cement has not pumped or treated groundwater under either the Rivergate facility or the Terminal facility. However, Ash Grove Cement understands that under CERCLA, "any kind of response action," can be read to include groundwater sampling. Accordingly, groundwater sampling and analysis events excluding testing potable water supply are included in the response to Question No. 66. The potable water supply testing dates and supporting documents are included in response to Question No. 65 and the relevant appendix.

Rivergate: Documentation related to groundwater response actions at the Rivergate facility is identified in Table 66-1. Copies of these data, analyses, and reports are provided in Appendix 66. Note that analyses conducted to evaluate the suitability of the groundwater as a domestic water supply are not included in this response, but can be found in the response to Question No. 65. In response to subpart e, persons, including contractors, with information about (a) through (c) of this request are listed below.

- Ash Grove Personnel (see the response to Question No. 38 for information regarding Ash Grove personnel):
    - William Kistler – Rivergate Plant Manager from 1966 – 1993
    - Doug Hale – Western Region Safety Director from Sept. 1979 – Oct. 1996
    - Dick Gable – Plant Superintendent from 1982 – 1998
    - Jim Post – V.P. and Technical Director from 1992 – June 1993
    - Glenn Dollar – Safety & Environmental Manager from 1998 to present
    - Gary Wright – Rivergate Plant Manager from 1998 to present

- John Hone – Terminal Manager from 1998 to present
- Ivan Taylor – Rivergate Production Supervisor from 1987 to present
- Albert Collinet – Rivergate Plant Manager from 1993-1998

- PBS Environmental
  Address: 1220 S.W. Morrison, Portland, OR 97205
  Phone Number: 503-248-1939
  - Erik Anderson, Registered Geologist, Director of Environmental Services
  - D. Hancock
  - Dulcy Berri
  - Heidi Yantz, Hydrogeologist
- Coffey Laboratories
  Address: 12423 N.E. Whitaker Way, Portland, OR 97230
  Phone Number: 503-254-1794
  - Susan M. Coffey, President
- Pacific Environmental Laboratory Inc.
  Address: 9405 S.W. Nimbus Ave., Beaverton, OR 97005
  Phone Number: 503-644-2202
  - Howard Holmes, Project Manager
  - Rob May, Project Manager
- American Environmental Network (AEN), Inc.
  Address: 17400 S.W. Upper Boones Ferry Road, Suite 270, Portland, OR 97224
  Phone Number: 503-684-0447
  - Jenna Gorham, Project Manager
- Integrity Brokers
  Address: 16869 S.W. 65th Avenue, #344, Lake Oswego, OR 97035
  - Darwin Thomas
- Environmental Science Corp.
  Address: 12065 Lebanon Rd., Mt. Juliet, TN 37122
  Phone Numbers: 615-758-5858, 800-767-5859
  - Mark Beasley

Terminal: Based on a review of historical documentation, no groundwater response actions of any sort have been taken by Ash Grove at the Terminal facility. Moreover, Ash Grove does not know whether any evidence exists and does not have any evidence of known spills or releases at the site would have resulted in an impact to the quality of the groundwater during Ash Grove's ownership of the property.

TABLE 66-1. DOCUMENTATION OF GROUNDWATER RESPONSE ACTIONS AT RIVERGATE

Date	Description	Reason for Action	Summary of Results	Individuals with Info Regarding Action
2/26/1993	Report about monitoring well installation and sampling near above ground oil storage tanks	The monitoring wells were installed as a leak detection indicator for the above ground fuel oil storage tanks	Test results from monitoring wells #1 and #3 indicated the presence of low levels of diesel fuel (690 parts per billion and 790 parts per billion respectively). No hydrocarbons were detected in well #2.	William Kistler, Doug Hale, Dick Gable – Ash Grove Cement Erik Anderson, Director of Environmental Services; D. Hancock – PBS Environmental Susan M. Coffey, President – Coffey Laboratories, Inc.
6/11/1993	Report of findings for groundwater sampling from monitoring wells near above ground oil storage tanks	To identify and quantify potentially hazardous constituents in the groundwater related to the diesel contamination identified in the initial round of testing.	The local shallow groundwater flow was estimated to be south/southeast. Pyrene, a common constituent of diesel fuel, was detected in the water from monitoring well #3 at a concentration of 0.12 parts per billion. No other contaminants were detected in any of the wells.	William Kistler, Jim Post – Ash Grove Cement Erik Anderson, Director of Environmental Services – PBS Environmental Howard Holmes, Project Manager; Rob May, Project Manager - Pacific Environmental Laboratory Inc.
6/22/1998	Report of findings for groundwater sampling from PBS Environmental	To check for hydrocarbon contamination of groundwater near the above ground fuel oil storage tanks.	Groundwater was inferred to be flowing toward the west. The laboratory analysis indicated that no BTEX, Polycyclic Aromatic Hydrocarbons (PAH)s, diesel, or heavy oil range petroleum hydrocarbons were detected in any of the water samples.	Glenn Dollar, Gary Wright – Ash Grove Cement Erik Anderson, Registered Geologist – PBS Environmental Jenna Gorham, Project Manager – American Environmental Network, Inc.

TABLE 66-1. DOCUMENTATION OF GROUNDWATER RESPONSE ACTIONS AT RIVERGATE (CONT'D)

Date	Description	Reason for Action	Summary of Results	Individuals with Info Regarding Action
9/27/2006	Proposal to test groundwater monitoring wells – mentions prior test results	To test for potential hydrocarbon contamination from the above ground fuel oil storage tanks	N/A	Glenn Dollar – Ash Grove Cement Dulcy Berri – PBS Environmental
10/30/2006 – 12/4/2006	Report of findings for groundwater sampling from monitoring wells near above ground oil storage tanks	To detect leaks from above ground fuel oil tanks	The inferred direction of groundwater flow was to the northwest. Low levels of diesel range organics (120 ug/L) were detected in well #3. TPH was not detected in well #1 or #2. A low level detection of 0.58 ug/L of Benzene was detected in well #3. There were no other BTEX detections in the other wells. Naphthalene was detected at 0.1 ug/L in well #1. There were no other detections of PAHs in any of the wells. The conclusion of the document dated 12/4/2006 states that "the low levels of contamination detected in the wells do not exceed the applicable state standards for occupational land use."	Glenn Dollar – Ash Grove Cement Heidi Yantz, Hydrogeologist – PBS Environmental Darwin Thomas – Integrity Brokers Mark Beasley – Environmental Science Corp

67. Was there ever a spill, leak, release or discharge of a hazardous substance, waste, or material into the Willamette River from any equipment, structure, or activity occurring on, over, or adjacent to the river? If the answer to the preceding question is anything but an unequivocal "no", identify and provide copies of any documents regarding:

- **a. the nature of the hazardous substance, waste, or material spilled, leaked, released or discharged;**
- **b. the dates of each such occurrence;**
- **c. the amount and location of such release;**
- **d. were sheens on the river created by the release;**
- **e. was there ever a need to remove or dredge any solid waste, bulk product, or other material from the river as a result of the release? If so, please provide information and description of when such removal/dredging occurred, why, and where the removed/dredged materials were disposed.**

Rivergate: With the exception of permitted outfall discharges of process wastewater and stormwater described previously in the response to Question No. 18. Table 67-1 provides a description of spills, leaks, releases or discharges of hazardous substances, wastes or materials into the Willamette River from any equipment, structure, or activity occurring on, over, or adjacent to the river from the Rivergate facility. Copies of documents associated with each occurrence that were identified during the records review process are included in Appendix 67.

As described in the response to Question No. 64, maintenance dredging occurred at the Rivergate facility to maintain safe access and berthing conditions for vessels off-loading material to the conveyor system. While the dredged materials did contain residual limestone from Ash Grove's unloading operations, the maintenance dredging projects were not the result of a single release event. Documentation regarding the 2007 maintenance dredging event was identified during the records review process. Although interviews with facility personnel indicate that some maintenance dredging occurred at the Rivergate facility, documentation for these earlier events was not identified. The response to Question No. 64 includes the information requested by Question No. 67e. Other than maintenance dredging, Ash Grove has not removed or dredged solid waste, bulk product, or other material from the river in response to any release at the Rivergate facility.

Terminal: To the best of Ash Grove's information and belief, and based on the records reviewed and interviews with facility personnel, spills, leaks or discharges of a hazardous substance, waste or material into the Willamette River from the Terminal Property have not been identified during the time period of Ash Grove's ownership, with the exception of the permitted discharge of stormwater. The stormwater discharge from Outfall 4 is permitted under General NPDES Stormwater Permit Number 1200-Z. A description of Outfall 4, as well as a description of the permitted sheet flow discharges of stormwater to the Willamette River from the Terminal facility property, is included in the response to Question No. 13i.

Ash Grove has not removed or dredged solid waste, bulk product, or other material from the river as a result of a release at the Terminal facility. Question No. 9 describes the investigations of the

Terminal property undertaken prior to Ash Grove's acquisition of each property for which Ash Grove has information.

TABLE 67-1. RIVERGATE SUMMARY OF SPILL, LEAK, RELEASE OR DISCHARGE OF A HAZARDOUS SUBSTANCE, WASTE, OR MATERIAL INTO THE WILLAMETTE RIVER

Date of Occurrence	Nature of Substance, Waste, or Material	Description of Occurrence
January 24, 1964	Soil	Heavy rains caused drainage problems and soil erosion on the river end of the south drainage ditch, where a large volume of dirt from the undeveloped site was washed into the river. Corrective actions included the installation of a concrete spillway at the location of the observed soil erosion and the construction of drainage ditches to divert stormwater from the property to the east of Rivergate around the Rivergate facility. Although no associated documentation was identified, it is unlikely that the erosion of soil would cause river sheen.
1970s[81]	Lime	Lime spillage on waterfront. No additional information is available. It is unlikely that river sheen resulted from lime spillage.
June 11, 1992	Limestone Rock	ODEQ was notified and came to investigate a spill on the dock that was thought to be lime, but was actually limestone rock. It is unlikely that river sheen resulted from limestone rock.

68. For any releases or threatened releases of PCB(s), identify the date, quantity, location and type of PCB(s), or PCB(s) containing materials or liquids, and the nature of any response to or cleanup of the release.

Rivergate: Rivergate facility records were reviewed and no documents indicating a release or threatened release of PCB(s) into the environment were identified. Per the May 16, 2005 SPCC plan, the Rivergate facility has experienced no reportable oil spills during its operation. Based on interviews with Ash Grove personnel at the Rivergate facility, the tanks holding the PCB-containing used oil suffered minor, non-reportable (less than 42 gallons) overflows approximately 2 to 3 times over the past 15 years. However, each overflow incident was contained within the containment area and proper spill cleanup methods were implemented.

[81] This line item is identified on the basis of a black and white photograph. The exact date of the photograph is unclear.

Terminal: To the best of Ash Grove's information and belief, there were no releases or threatened releases of PCBs or PCB containing material or liquids at the Terminal facility during Ash Grove's ownership of the property.

69. For any releases or threatened releases of PCB(s) and/or PCB(s) containing materials or liquids, identify and provide copies of any documents regarding the quantity and type of waste generated as a result of the release or threatened release, the disposition of the waste, provide any reports or records relating to the release or threatened release, the response or cleanup and any records relating to any enforcement proceeding relating to the release or threatened release.

To the best of Ash Grove's information and belief, no reports or records were required or generated regarding the incidents when the tanks holding PCB-containing used oil have been overflowed, as described in the response to Question No. 68. Records for both the Rivergate and Terminal facilities were reviewed and no documents indicating a release or other threatened releases into the environment were identified during Ash Grove's ownership of the property.

70. Provide information and documentation concerning all inspections, evaluations, safety audits, correspondence and any other documents associated with the conditions, practices, and/or procedures at the Property concerning insurance issues or insurance coverage matters.

Ash Grove maintains records of inspections conducted for fire protection and boiler insurance purposes. These inspections are not included with this response, but can be provided upon request.

71. Describe the purpose for, the date of initiation and completion, and the results of any investigations of soil, water (ground or surface), sediment, geology, and hydrology or air quality on or about each Property. Provide copies of all data, reports, and other documents that were generated by you or a consultant, or a federal or state regulatory agency related to the investigations that are described.

We understand EPA's request in Question No. 71 to refer to investigations that specifically relate to the environment [soil, water (ground or surface), sediment, geology, and hydrology or air quality] on or about Ash Grove's properties. That is, this question does not refer to investigations or studies about Ash Grove's emissions, discharges, operations, or materials, which are addressed by other questions in EPA's information request.

Table 71-1 includes the information requested by Question No. 71 for each relevant investigation of environmental media conducted by or on behalf of Ash Grove or by a federal or state regulatory agency for the Rivergate facility. Note that analyses conducted to evaluate the suitability of the groundwater as a domestic water supply at the Rivergate facility are not included in this response, but can be found in the response to Question No. 65. Table 71-2 provides responsive information requested by Question No. 71 for the Terminal facility. Table 71-3 provides information requested by Question No. 71 which was inherited from prior owners of the Terminal facility. If not already included in Appendix 15, copies of this documentation are included in Appendix 71.

TABLE 71-1. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT RIVERGATE

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Preliminary Foundation Investigation, Proposed Lime and Cement Plant, Rivergate Area, Portland, Oregon for the Ash Grove Lime and Portland Cement Company [82]	Provide general subsurface information regarding the site and to provide general foundation design information and anticipated settlements for feasible type foundation support	Soil	1962	1962	Subsurface conditions are relatively uniform: 30 feet of hydraulic fill sand, underlain by 40 feet of compressible soils, followed by a relatively compact sand formation.
Supplemental Foundation Investigation, Proposed Lime and Cement Plant, Rivergate Area, Portland, Oregon for the Ash Grove Lime and Portland Cement Company [83]	Provide additional subsurface information at specific location and to provide data to be utilized in developing foundation design recommendations for specific units	Soil	1962	1962	General conclusions presented in preliminary report are valid for the soil conditions disclosed by the additional explorations.
Supplemental Foundation Investigation and Settlement Studies, Lime Bins and Bulk Storage Tunnel, Rivergate Area, Portland, Oregon for Ash Grove Lime and Portland Cement Company [84]	Provide information pertaining to the slight tilting of the lime bins and the larger-than-predicted settlement for the bins and the tunnel under the 50,000-ton storage pile	Soil	April 1963	May 1963	The additional subsurface explorations at the east and west sides of the lime bin structure disclose essentially similar soil formation. Subsequent level readings indicate mat tilting has reduced to approximately one inch.
Petroleum Equipment Maintenance Co. Client Report Information	Study of the soil in the area where two USTs were removed	Soil	1990	1990	Not provided in document
JOB #2421 Ash Grove Cement PEL #90-0178	Study of the soil in the area where two USTs were removed	Soil	1990	1990	One sample showed 70 ppm TPH. A second sample was non-detect for TPH.

[82] Although the proposal identifies that Rivergate facility as a lime and cement plant, the Rivergate facility has only operated as a lime plant. Also, as noted in the response to Question No. 74 (c) from 1937 to 1968 Ash Grove operated under the name Ash Grove Lime & Portland Cement Company.

[83] Ibid.

[84] Ibid.

TABLE 71-1. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT RIVERGATE (CONT.)

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Procedures and results of soil sampling documented by PEMCO upon removal of a 550 gallon gasoline tank	Analyze soil in vicinity of underground storage tank, following tank removal	Soil	1990	1990	The soil sampling results fall below the level II clean up standard of 80 ppm TPH. As such, ODEQ clean up criteria were effectively met for this site. No cleanup was required.
Sounding map	Study of the river bottom	Geology	July 22, 1991	July 22, 1991	Depths to river bottom
Sounding map	Study of the river bottom	Geology	September 5, 1992	September 5, 1992	Depths to river bottom
Ash Grove Cement Plant, Portland, Oregon Monitoring Well Installation and Monitoring PBS Project No. 5065.00	Leak detection for above ground fuel oil tanks at the Ash Grove Portland Plant	Water	December 21, 1992	February 26, 1993	Low levels of diesel fuel (690 and 790 ppb) were detected in two of the three wells. The cause of the release was eliminated by the placement of a concrete slab around the tanks.
Monitoring well and geo-technical hole reports	During the installation of the monitoring wells in the tank farm area, a well log was created, which includes data regarding the composition of the soil.	Geology	December 22, 1992	December 22, 1992	Soils include sand and silty clay.
Ash Grove Cement Plant, Portland, Oregon Groundwater Monitoring – Fuel Oil Tank Farm Follow-Up Monitoring PBS Project No. 5065.10	Test for BTEX, PAH (pyrene), and Other PAH Compounds in the tank farm monitoring wells.	Water	April 22, 1993	June 11, 1993	With one exception, results for BTEX, PAH (pyrene), and Other PAH Compounds were non-detect on samples from the three wells. Well #3 showed a result of 0.12 ppb PAH (pyrene), which is well below ODEQ's groundwater reference concentration of 1.0 ppm.

TABLE 71-1. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT RIVERGATE (CONT.)

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Ash Grove Cement Plant, Portland, Oregon Groundwater Monitoring – Fuel Oil Tank Farm Follow-Up Monitoring PBS Project No. 5065.10	Identify and quantify potentially hazardous constituents in the water from the groundwater monitoring wells related to diesel fuel contamination.	Water	April 22, 1993	June 11, 1993	Pyrene was detected in water from one of the three wells at 0.12 ppb, a concentration below the groundwater reference concentration of 1.0 ppm.
Sounding map	Study of the river bottom	Geology	September 17, 1993	September 17, 1993	Depths to river bottom
Geotechnical Investigation, Proposed Mill Expansion, Ash Grove Lime and Portland Cement Company	Geotechnical field exploration, laboratory testing, and engineering analysis for proposed plant addition	Geology	October 30, 1996	November 21, 1996	The proposed expansion can be adequately supported on augercast pile foundations established in the medium dense sand layer at tip depths of 65 to 100 feet below the base of the pile caps. The proposed expansion facility will experience up to 16 inches of post-construction settlement.
Report of Findings, Groundwater Monitoring – May 1998, Ash Grove Cement Lime Plant, PBS Project #12730.00	Monitor groundwater quality in tank farm area to identify potential leakage from the tanks into the shallow groundwater	Water	May 22, 1998	June 22, 1998	Laboratory analyses indicate that no petroleum hydrocarbons, BTEX, or PAHs are present in the groundwater at concentrations above their detection limits. Continued periodic sampling of groundwater is recommended as a means of detecting leakage from the base of the tanks.
Monthly Environmental Report	Monitor groundwater quality in tank farm area to identify potential leakage from the tanks into the shallow groundwater	Water	May 22, 1998	June 22, 1998	Laboratory analyses indicate that no petroleum hydrocarbons, BTEX, or PAHs are present in the groundwater at concentrations above their detection limits. Continued periodic sampling of groundwater is recommended as a means of detecting leakage from the base of the tanks.

TABLE 71-1. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT RIVERGATE (CONT.)

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Source water assessment report	Identification of the area most critical to maintaining safe drinking water (Outreach Area), an inventory of potential sources of contaminants within the Outreach Area, and an assessment of the relative threat that these potential sources pose to the water system	Water	July 2000	July 2000	The Outreach Area for Ash Grove Cement West is a circle with radius of 500 feet centered on the system's 1963 well. The aquifer is considered highly sensitive based on the shallow water table, the highly permeable aquifer and overlying materials. Potential sources of contaminants within the Outreach Area include an on-site sewage disposal system, a waste oils storage tank with a containment spill system, and truck and railroad transportation corridors.
Proposal for sediment characterization at Ash Grove Cement Company's Rivergate Lime Plant	Proposal only	Soil	October 24, 2004	October 24, 2004	N/A
Notes on dredged sediment	Notes only	Soil & Geology	2005	2005	N/A

TABLE 71-1. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT RIVERGATE (CONT.)

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Sampling and Analysis Plan	Plan for sampling sediment to "support regulatory agency review regarding water quality during dredging as well as the newly exposed sediment surface after completion of dredging."	Soil	April 7, 2005	April 7, 2005	N/A
Sediment Data Report	Sediment characterization conducted to support regulatory agency review regarding water quality during dredging as well as the newly exposed sediment surface after completion of dredging	Soil & Water	June 2005	June 2005	Based on the results of the investigation, the landfill material was disposed of at Wasco County landfill.
General questionnaire received from an ODEQ Site Assessment Specialist	Ash Grove provided answers to a general questionnaire received from an ODEQ Site Assessment Specialist	Water	September 1, 2006	September 1, 2006	Information provided to ODEQ
Proposal to test groundwater monitoring wells	Proposal only	Water	October 3, 2006	October 3, 2006	N/A
Groundwater Monitoring Report	Monitor the groundwater quality in the tank farm area prior to potential abandonment required during tank farm decommissioning	Water	October 11, 2006	October 30, 2006	The low levels of contamination detected in the wells do not exceed the applicable state standards for occupational land use. Therefore, should the tank farm be decommissioned, the wells can be properly abandoned.
Plan View of Proposed Dredging and Sample Locations	An image outlining the proposed dredging work.	Hydrogeology	2007	2007	N/A

TABLE 71-2. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT TERMINAL

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Hydraulic Oil Clean-up Status Report	Evaluate the extent of petroleum contamination and dispose of any contaminated soil encountered.	Soil	July 11, 2001	July 25, 2001	Soil testing was conducted on samples taken from an excavation pit located near the South Terminal north railroad track. Low levels of petroleum hydrocarbon were detected in the soil samples. The samples contained diesel fuel, which a report suggests did not originate from Ash Grove's operations.
Hydrographic Survey Drawings of River Site	Study of the river bottom	Hydrogeology	September 20, 2005	September 20, 2005	Depths to river bottom
Photos and Memos Investigating Offsite Source of Oil Sheen On River	To document an oil sheen caused by an off-site source	Water	October 20, 2006	October 20, 2006	Oil sheen from offsite source
Sampling and Analysis Plan	Plan only	Soil & Water	February 2007	February 2007	N/A
Army Corp of Engineers Response to Sampling and Analysis Plan	Plan only	Soil & Water	May 24, 2007	May 24, 2007	N/A
PBS Dredging Project Proposal	Proposal only	Soil & Water	August 2007	August 2007	N/A
PBS Dredging Project Proposal	Proposal only	Hydrogeology	October 2, 2007	October 2, 2007	N/A
PBS Memorandum – November 12, 2007	Discussion of the disposal of dredged material. Includes results of sediment sampling	Hydrogeology	October 2007	November 2007	The presence of PAHs and some metals were detected. The source of this contamination was not identified.
PBS November Invoice	Invoice only	Hydrogeology	November 2007	December 2007	N/A

TABLE 71-2. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT TERMINAL (CONT.)

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Email Correspondence with State about Dredging	Discussion of dredge sediment sampling	Hydrogeology	May 2007	September 2007	The samples taken were analyzed and suitable disposal locations determined.
PBS Memorandum Regarding Dredging Project	To determine if sediment is suitable for dredging and what location is suitable for disposal of the sediment	Hydrogeology	2008	2008	The samples taken were analyzed and suitable disposal locations determined.

TABLE 71-3. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT TERMINAL – INHERITED FROM PRIOR OWNERS

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Analytical Results from Soil Samples Collected During 1989 Storage Tank Removal	Provides analytical results from eight soil samples collected during the removal of a UST in 1989.	Soil	April 1989	April 1989	Sampling results show TPH concentrations ranging from 5.3 to 8.0 mg/kg.
Portland Unloading Facility Coal Pitch Survey in the Sediments Adjoining the Unloading Dock	To determine if pitch is present in the soils adjacent to the unloading facility.	Hydrogeology	March 18, 1990	April 5, 1990	The river bottom adjacent to the unloading facility was surveyed for the presence of pitch over its 720 foot length. Core samples taken to a depth 1.5 f
Phase II Site Assessment of UPRR Albina Railyard Property, Portland, Oregon including Soil Sample Analysis Results	Phase II Site Assessment	Soil & Water	1991	1992	Analytical results of TPH, volatile organic hydrocarbons, PCBs, and metals are provided. (See report in Appendix 71 for numerical results).

TABLE 71-3. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT TERMINAL – INHERITED FROM PRIOR OWNERS (CONT.)

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Summary of Phase I ESA and Environmental Compliance Review for Columbia Aluminum Facilities	Phase I Environmental Assessment	Soil & Water	1996	1996	There are no recommended actions to the facility site. An updated version of this assessment is included in Appendix F of the site assessment conducted by Ash Grove, dated 9/26/2005.
Sediment Sampling Results; Goldendale Aluminum Co., Multnomah County, OR; Corps Permit Application ID No. 97114		Soil			Analytical results show that there are no sediment constituents or physical parameters of concern.
Sediment Sampling Results; Goldendale Aluminum Co., Multnomah County, OR; Corps Permit Application ID No. 97114	Provide characterization of sediments at the site, where maintenance dredging activity is proposed	Soil	October 19, 1998	March 22, 1999	There were no sediment constituents or physical parameters of concern at the site. For the parameters analyzed, either the analytes were not detected, or concentrations were well below the screening levels (i.e. concentrations at or below which sediment is judged to be suitable for aquatic disposal without the need for biological testing).

TABLE 71-3. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT TERMINAL – INHERITED FROM PRIOR OWNERS (CONT'D)

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Request for Performance of Preliminary Assessment with Sampling – Goldendale Aluminum Site and ODEQ Site Assessment Program – Strategy Recommendation	This review is limited to establishing a link between site activities and contamination in adjacent Portland Harbor sediments.	Soil & Hydrology	November 18, 1999	December 9, 1999	The ODEQ Site Assessment Program prepared a strategy recommendation for the Goldendale facility. A history of investigations on sediment and hydrology are included in the recommendation. The recommendation concludes that an Expanded Preliminary Assessment should be conducted on the property.
Goldendale Aluminum Company Dredge Sample Screening - DRAFT	Includes analytical test results for various chemicals.	Soil	February 2000	February 2000	(See report in Appendix 71 for numerical results).
Sampling and Analysis Work Plan	Plan only	Soil	June 2000	June 2000	N/A
Draft Analytical Results	Includes analytical test results for various chemicals.	Soil	June 2000	June 2000	(See report in Appendix 71 for numerical results).
Sampling and Analysis Work Plan for the Planned Dredging Activities at Goldendale Alumina Unloading Facility	Plan only	Soil	June 2, 20000	June 2, 20000	N/A
Hydrographic Survey of the Goldendale Aluminum Co. Dock Facility Located on the Willamette River	Study of the river bottom	Hydrogeology	October 13, 2000	October 13, 2000	N/A

TABLE 71-3. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT TERMINAL – INHERITED FROM PRIOR OWNERS (CONT'D)

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
Updated Preliminary Assessment and Dredging Sampling Results – Goldendale Alumina Unloading Facility	To test sediment and determine CGAC's contribution to potential contaminants.	Soil	2000	2001	Sediment tests show contamination, but CGAC is not believed to have been a significant source of sediment contamination.
Response to ODEQ's Comments on the 2001 Preliminary Assessment	Comments from ODEQ only	Soil	May 4, 2001	May 4, 2001	N/A
ODEQ Strategy Recommendation Update Goldendale Alumina Unloading Facility and Sediment Test Results	Update on recommendations after review of Expanded Preliminary Assessment	Soil	November 18, 1999	July 25, 2001	After reviewing Goldendale's Expanded Preliminary Assessment, ODEQ concludes that the upland site at the facility does not appear to be a current source of sediment contamination. ODEQ's recommendations include issuing "a no further action letter for the upland subject site."
Hydrographic Survey Drawings of River Site	Study of the river bottom	Hydrogeology	September 20, 2005	September 20, 2005	N/A
Various Documents Regarding Preliminary Site Assessment	Provdes concentration of contaminants in sediment, among other things.	Soil	2001	2001	(See report in Appendix 71 for numerical results).
Request for, Strategy Recommendation for, and Comments on Preliminary Site Assessment	Preliminary Site Assessment	Soil	December 7, 1999	May 9, 2000	ODEQ issued comments on Goldendale's Expanded Preliminary Assessment and Goldendale responded to the comments, through a third-party consultant.

TABLE 71-3. DETAILS REGARDING INVESTIGATIONS OF ENVIRONMENTAL MEDIA AT TERMINAL – INHERITED FROM PRIOR OWNERS (CONT'D)

Name of investigation	Purpose	Environmental Media	Date initiated	Date completed	Summary of results
TPH and BTEX/N results from the groundwater sampling at the Portland facility	Tested groundwater fro TPH and BTEX/N	Water	December 2002	January 2003	TPH and BTEX/N concentrations in groundwater were non-detect.
Groundwater Assessment Report Goldendale Alumina Unloading Facility, Portland, Oregon	The assessment was completed to support GAC's request for a No Further Action determination of the site.	Water	November 26, 2002	January 12, 2003	Gasoline range petroleum hydrocarbons were not detected above the laboratory Method Reporting Limits (MRLs) in each of the eight groundwater samples. BTEX/N concentrations were not detected above the MRLs in the eight groundwater samples.

72. Describe any remediation or response actions you or your agents or consultants have ever taken on each Property either voluntarily or as required by any state or federal agency. If not otherwise already provided under this Information Request, provide copies of all investigations, risk assessments or risk evaluations, feasibility studies, alternatives analysis, implementation plans, decision documents, monitoring plans, maintenance plans, completion reports, or other document concerning remediation or response actions taken on each Property.

Table 72-1 identifies remediation or response actions taken by Ash Grove or its agents or consultants at the Rivergate facility. Table 72-2 identifies remediation or response actions taken by Ash Grove or its agents or consultants at the Terminal facility. Copies of relevant documents are included in Appendix 72.

Although Ash Grove would generally assume that "remediation or response actions," would be used as those terms are defined under federal or Oregon law to pertain to releases of hazardous substances, because EPA did not define the terms in that way, Ash Grove has included certain other responses taken by the company to respond to site operations or conditions in its answer to this question.

TABLE 72-1. REMEDIATION AND RESPONSE ACTIONS TAKEN AT THE RIVERGATE FACILITY

Year	Name	Description
1974	Installation of quicklime dust control system.	In 1974, Ash Grove installed a quicklime dust control system. This action served as the required response to a violation Ash Grove received on June 4, 1973 from the Columbia-Willamette Air Pollution Authority in regards to visible emissions from the number two cooler exhaust caused by a process upset. Correspondence from ODEQ dated April 16, 1974 confirms that the quicklime dust control system satisfies the response action required by the June 4, 1973 violation. In response to the same violation, Ash Grove purchased and used additional hoses and sprinklers to minimize dust. The action served as the response action to the section of the violation describing excessive amounts of dust being generated by various vehicular traffic.
1996	Installation of Pneumatic Conveyor System	A pneumatic conveyor was installed to reduce dust emissions occurring during the emptying of a dust collector on-site. Prior to the installation of the pneumatic conveyor, material was emptied from the dust collector simply by opening the holding tank and allowing dust to fall into a bucket. Ash Grove had received several complaints about dust emission during May and June 1996. According to interviews with plant personnel, this conveyor was installed shortly after the complaints in May and June 1996.

TABLE 72-1. REMEDIATION AND RESPONSE ACTIONS TAKEN AT THE RIVERGATE FACILITY (CONT.)

Year	Name	Description
1998	Cleanup of neighboring property and improvements to water management.	In response to complaints of excess water from the kilns spilling onto a neighboring property, Ash Grove removed trace amounts of lime from the neighboring property and added a layer of rocks for aesthetic purposes. Corrective actions at the Ash Grove facility included fortifying the kiln buttress blocks and adding additional pumps on the line.
2000	Operational Improvements	In July 2000, a neighboring facility complained about dust emissions from the Rivergate facility. The main cause of the dust emissions include a malfunction of the rotary valve located along the south perimeter of the kiln department. Other contributing causes were baghouse emissions, fugitive dust from material transport and stockpiles, and painting/sandblasting work conducted by a contractor. Actions initiated in response to this complaint included fixing the rotary valve, checking amount of water on material transported by conveyor, increasing the usage of the water truck, cleaning up the kiln department area and the area along the south fence.
2002	Operational Improvements	New filter devices were installed in Kiln #3 to correct a problem with inconsistent fuel oil flow rate. The inconsistent fuel flow rate caused a buildup of material in the lines. The release of the buildup caused an excess oil flow to the kiln, leading to an excess emission event. In addition to installing a new filter device, the problem was discussed with, and additional training provided to, kiln operations personnel. This event and corresponding response actions were reported to Kathy Amidon at ODEQ.
2000 - 2001	Soil removal and cleanup	Cleanup of leaks possibly from hydraulically operated power units used to move railcars (i.e., rail indexers) there is a suggestion that there may also be some area-wide petroleum impacts throughout the floodplain in this vicinity. See the response to Question No. 64 for more information.
2007	Air Slide Repair	In April 2007, corrective action was taken to address an air slide rupture which caused cement dust to spill out onto the ground. The rupture was caused by a valve not being in the open position. The closed valve was opened and the ruptured air slide was repaired.
2008	Permitted Discharge Area Cleanup	In 2008, corrective action was taken in response to an inspection report sent to Ash Grove from the City of Portland's Bureau of Environmental Services. Ash Grove has cleaned out the permitted discharge area which receives truck wash water (removed blown-in litter and trimmed vegetative overgrowth). In addition, as of May 15, 2008, Ash Grove is in the process of planting vegetation around the discharge area.

73. Are you or your consultants planning to perform any investigations of the soil, water (ground or surface), geology, hydrology, and/or air quality on or about the Property? If so, identify:

a. What the nature and scope of these investigations will be;
b. The contractors or other persons that will undertake these investigations;
c. The purpose of the investigations;
d. The dates when such investigations will take place and be completed; and
e. Where on the Property such investigations will take place.

Question No. 73 asks whether the Respondent is "planning to perform any investigations of the soil, water (ground or surface), geology, hydrology, and/or air quality on or about the Property." In EPA's April 8, 2008 response to suggestions for the 104(e) information request (specifically, the response to Question No. 73, labeled as Question No. 68 in EPA's response), Ms. Lori Houck-Cora states that:

If Respondents have generally described in a previous answer investigations required to be conducted to comply with state or federal permits, then Respondent for this question need only identify investigations planned in the future for other purposes or reasons.

At the time of this submission, Ash Grove does not plan any investigations of the soil, water, geology, hydrology, or air quality on or about any of the properties identified in the response to Question No. 4.

74. Provide the following information, when applicable, about you and/or your business(es) that are associated with each Property identified in response to Question 4:

a. state the current legal ownership structure (e.g., corporation, sole proprietorship);

As noted in response to Question No. 1, Ash Grove Cement Company is a Delaware corporation.

b. state the names and current addresses of current and past owners of the business entity or, if a corporation, current and past officers and directors;

For current and past officers and directors see Appendix 74b.

c. discuss all changes in the business' legal ownership structure, including any corporate successorship, since the inception of the business entity. For example, a business that starts as a sole proprietorship, but then incorporates after a few years, or a business that is subsequently acquired by and merged into a successor. Please include the dates and the names of all parties involved;

Ash Grove Cement Company has been a corporation before and since 1937 to present. However, until 1968 Ash Grove Cement Company operated under the name Ash Grove Lime & Portland Cement Company.

Ash Grove was a subsidiary of The Vinton Corporation, a Delaware corporation, until 2000. The Vinton Corporation was a holding company and neither had nor exercised any degree of control over the daily operations or decision-making of Ash Grove's business operations, including operations at either the Rivergate or Terminal sites. Lyman-Richey Corporation, a Delaware corporation headquartered in Omaha, NE, was also a subsidiary of The Vinton Corporation. Lyman-Richey Corporation neither had nor exercised any degree of control over the daily operations or decision making of Ash Grove's business operations. Lyman-Richey has not been involved with any of the operations at either the Rivergate or Terminal sites. In 2000, The Vinton Corporation was merged into Ash Grove Cement Company and Lyman-Richey Corporation became a subsidiary of Ash Grove.
It should also be noted that, effective 1984, Ash Grove had a subsidiary, Ash Grove Cement West, Inc., which subsequently was merged into Ash Grove on December 31, 1991. While Ash Grove Cement West, Inc. was not a property owner or operator of either the Rivergate or Terminal sites, the subsidiary's name was inadvertently used by various parties in some of the documents included in the appendices since that was a company name commonly used by the Western Region office until the merger.

d. the names and addresses of all current or past business entities or subsidiaries in which you or your business has or had an interest that have had any operational or ownership connection with the Properties identified in response to Question 4. Briefly describe the business activities of each such identified business entities or subsidiaries; and

Both Rivergate and the Terminal sites have been under Ash Grove's ownership and operational control from the dates and in the manner described in earlier responses to Question Nos. 4, 5 and 7 to present,

Ash Grove does have a 50/50 joint venture between Ash Grove's subsidiary, Rivergate LFG, Inc., and the Portland Landfill Gas Corporation which was established in April 1997 in order to provide landfill natural gas to the Rivergate plant from the St. Johns's Landfill located in Portland, OR,

Between October 1992 and January 1, 2008, Ash Grove and its Canadian subsidiary, 3699 Investments Ltd., had a 50/50 joint venture with Seaspan International, Ltd, a Canadian corporation (Seaspan), regarding the ownership of three ocean going barges. These barges were towed by Seaspan-provided tugs and hauled limestone from Canadian quarries to the Rivergate plant. Although the joint venture was terminated in 2008, Seaspan still provides barge services to deliver limestone to the Rivergate facility.

e. **if your business formerly owned or operated a Property identified in response to Question 4, describe any arrangements made with successor owners or operators regarding liability for environmental contamination or property damage.**

Not applicable.

75. List all names under which your company or business has ever operated and has ever been incorporated. For each name, provide the following information:

a. **whether the company or business continues to exist, indicating the date and means by which it ceased operations (e.g., dissolution, bankruptcy, sale) if it is no longer in business;**

Yes, Ash Grove Cement Company continues to exist (see response to Question No. 74c above).

b. **names, addresses, and telephone numbers of all registered agents, officers, and operations management personnel; and**

Ash Grove's registerd agent for Oregon matters is CT Corporation, 388 State St., Suite 420, Salem, OR 97301-3581.

For officers, see the response the Question No. 74 b above. Officers can be reached through the Overland Park (913-451-8900) and Western Region (503-207-2100) corporate office numbers listed in response to Question No. 2 d above.

For operations management personnel regarding both the Rivergate and Terminal Sites, the following personnel may be contacted through the Western Region office (503-207-2100):

Gary Wright – Portland Operations Manager
John Hone - Terminal Manager
Glenn Dollar – Safety & Environmental Manager
Kenneth J. Rone – V.P. Mfg. Services Western Div.

c. **names, addresses, and telephone numbers of all subsidiaries, unincorporated divisions or operating units, affiliated, and parent corporation if any, of the Respondent.**

Regarding relevant affiliates, Ash Grove has a 50/50 joint venture between Ash Grove's subsidiary, Rivergate LFG, Inc., and the Portland Landfill Gas Corporation provide landfill gas to the Rivergate plant as described in the response to Question

No. 74 d above. Rivergate LFG, Inc.'s contact information is the same as its parent, Ash Grove in Question No. 2 above.

Other corporate affiliates of Ash Grove include several dozen subsidiary corporations which produce ready mixed concrete, sand and gravel construction aggregates, concrete block, precast concrete and building related materials at over 50 locations in Kansas, Missouri, Nebraska, Iowa and Colorado. None of these affiliates have operations that in any way ever impacted the Rivergate or Terminal sites. None of these affiliates have ever owned any interest in either property. Detailed information on the affiliates has not been provided because to do so would be unduly burdensome and unlikely to produce information relevant to the Portland Harbor Investigation Area.

76. Provide all copies of the Respondent's authority to do business in Oregon. Include all authorizations, withdrawals, suspensions and reinstatements.

In preparing a response to Question No. 76, Ash Grove relied upon the guidance provided in EPA's April 8, 2008 response to suggestions for the 104(e) information request (specifically, the response to Question No. 76, labeled as Question No. 71in EPA's response). In the response to Question No. 76 and the question whether Respondents are to include documents *"other than periodic renewals that do not change any terms of the authorization,"* Ms. Lori Houck-Cora states:

EPA is not seeking duplicative information.

Accordingly, please see Appendix 76 for Ash Grove's authority to do business in Oregon.

77. If Respondent is, or was at any time, a subsidiary of, otherwise owned or controlled by, or otherwise affiliated with another corporation or entity, then describe the full nature of each such corporate relationship, including but not limited to:

a. a general statement of the nature of relationship, indicating whether or not the affiliated entity had, or exercised, any degree of control over the daily operations or decision-making of the Respondents business operations at the Site;

See response to Question No. 74c above.

b. the dates such relationship existed;

See response to Question No. 74 c above.

c. the percentage of ownership of Respondent that is held by such other entity(ies);

Not applicable. See response to Question No. 74 c above.

d. **for each such affiliated entity provide the names and complete addresses of its parent, subsidiary, and otherwise affiliated entities, as well as the names and addresses of each such affiliated entity's officers, directors, partners, trustees, beneficiaries, and/or shareholders owning more than five percent of that affiliated entity's stock;**

Not applicable. See response to Question No. 74 c above.

e. **provide any and all insurance policies for such affiliated entity(ies) which may possibly cover the liabilities of the Respondent at each Property; and**

See Appendix 77e for property, general liability, umbrella and pollution policies for 1963 to present, covering the period(s) that Respondent has had any interest in the Rivergate and Terminal sites.

Respondent carries or has carried other miscellaneous types of insurance coverage during the applicable period, such as workers compensation, crime, cargo and wharfingers' coverage. Copies of these policies are not included in Appendix 77e. To attempt to provide copies of all these policies would be unduly burdensome and very unlikely to lead to any information relevant to the RFI.

f. **provide any and all corporate financial information of such affiliated entities, including but not limited to total revenue or total sales, net income, depreciation, total assets and total current assets, total liabilities and total current liabilities, net working capital (or net current assets), and net worth.**

See Ash Grove consolidated tax returns for years 2005 through 2007 in Appendix 77 f of the DVD labeled "Confidential Materials." While these returns do not specifically relate to this investigation, Ash Grove believes they may relate to EPA's evaluation of Ash Grove's financial situation and are included accordingly. Pursuant to 42 USC §§ 9604(e) (7) (E) and (F), and 40 CFR Part 2, Ash Grove asserts that the consolidated tax returns provided on the disk marked "Confidential Information" are entitled to confidential treatment. These documents are not reasonably obtainable by other persons without Ash Grove's consent. Ash Grove is aware of one instance in which these materials have been disclosed, and that was under a confidential label to EPA Region X in another investigation. The information is not required to be disclosed, or otherwise made available, by any law. Moreover, the information contained in these returns would put Ash Grove at a competitive disadvantage if it were disclosed because of the detail included.

78. If Respondent is a partnership, please describe the partnership and provide a history of the partnership's existence. Provide a list of all current and past partners of any status (e.g., general, limited, etc) and provide copies of all documents that created, govern, and otherwise rules the partnership, including any amendments or modification to any of the originals of such documents, and at lease five years of partnership meeting minutes.

Not applicable. Ash Grove is a corporation.

79. Describe all sources reviewed or consulted in responding to this request, including, but not limited to:

a. the name and current job title of all individuals consulted;

See response to Question No. 2. In addition, the individuals listed in Table 79-1 were also contacted for the purpose of developing this response.

TABLE 79-1. INDIVIDUALS CONTACTED IN GENERATING THIS RESPONSE

Company	Contact	Phone Number	Location
PBS Environmental	Christy McDonough Environmental Planner	360-213-0444	Vancouver, WA
Greenberry Industrial	Tom McLaughlin	360-607-4375	Corvallis, OR
Jammies Environmental	Kelly (did not identify last name) Office Staff	360-577-5691	Longview, WA
Cowlitz Clean Sweep	Scott Gilfilan	360-957-2018	Longview, WA
Ross Island Sand & Gravel	Paul Godsil	503-239-5507	Portland, OR
Oregon DSL	Ursula A. Sperry Land Specialist	503-986-5274	Salem, OR
Maul Foster & Alongi, Inc.	Michael Rounds Staff Engineer	360-694-2691	Vancouver, WA

TABLE 79-1. INDIVIDUALS CONTACTED IN GENERATING THIS RESPONSE (CONT'D)

Company	Contact	Phone Number	Location
Keystone Contracting Inc.	Larry Tingley Manager	360-887-8157	Ridgefield, WA
Ash Grove	Stan Webb	206-241-6507	Burien, WA
Ash Grove	Bill Kistler	503-655-9638	Portland, OR
Ash Grove	Bill Siemering	707-591-5757	Bodega Bay, CA
Ash Grove	Steve Sheridan	33-6-09-61-38-49	Deauville, France
Ash Grove	Henrik Voldbaek	425-251-5422	Seattle, WA
Ash Grove	Ralph Jones	870-542-6217	Foreman, AR
Ash Grove	Werner Storch	541-595-0185	Oregon
Ash Grove	Bob Dabler	913-451-8900	Overland Park, KS
Ash Grove	Craig Puljan	206-623-5596	Seattle, WA
Ash Grove	Gerald Brown	206-623-5596	Seattle, WA
Ash Grove	Steve Ryan	913-451-8900	Overland Park, KS

b. the location where all sources reviewed are currently reside; and

1. Rivergate Plant:

Physical & Mailing Address:
13939 N. Rivergate Blvd.
Portland, OR 97203

2. Portland Cement Terminal:

Physical & Mailing Address:

3737 N. Port Center Way
Portland, OR 97217

3. Overland Park, KS Home Office:

Physical Address:
11011 Cody
Overland Park, KS 66210

Mailing Address:
P.O. Box 25900
Overland Park, KS 66225

4. Western Region Office:

Physical Address:
5 Centerpointe Dr., Suite 350
Lake Oswego, OR 97035

Mailing Address:
P.O. Box 240
Lake Oswego, OR 97207

c. the date consulted.

Ash Grove has consulted with the persons listed in these responses on various dates and at various times since receiving the RFI. Preparation of these responses is an iterative, interactive and dynamic process and Ash Grove did not keep a log of such contacts.

80. If not already provided, identify and provide a last known address or phone number for all persons, including Respondent's current and former employees or agents, other than attorneys, who have knowledge or information about the generation, use, purchase, storage, disposal, placement, or other handling of hazardous materials at, or transportation of hazardous substances, waste, or materials to or from, each Property identified in response to Question 4.

To the best of Ash Grove's information and belief, it has listed the persons with knowledge or information in its prior responses. However, if additional responsive information is developed, Ash Grove will supplement the response to this Question No. 80.

81. If any of the documents solicited in this information request are no longer available, please indicate the reason why they are no longer available. If the records were destroyed, provide us with the following:

a. the document retention policy between 1937 and the present;

Respondent's policy with respect to document retention has been to retain documents for the period necessary to meet applicable legal requirements and business needs.

b. the approximate date of destruction;

Because of the informal nature of documents destruction, Ash Grove does not have records indicating dates of destruction.

c. a description of the type of information that would have been contained in the documents;

See response to Question No. 81 b above.

d. the name, job title and most current address known by you of the person(s) who would have produced these documents; the person(s) who would have been responsible for the retention of these documents; the person(s) who would have been responsible for destroying the documents; and the person(s) who had and/or still have the originals or copies of these documents; and

See response to Question No. 81 b above.

e. the names and most current addresses of any person(s) who may possess documents relevant to this inquiry.

See response to Question No. 81 b above.

82. Provide a description of all records available to you that relate to all of the questions in this request, but which have not been included in your responses.

In the course of preparing these responses, Ash Grove identified the following categories of records that relate to the questions but have not been included in these responses:

- Documents inherited from prior owners of the Terminal facilities;
- Except as otherwise noted in these responses, documents dated on or after May 17, 2008. To the extent these are responsive to the questions posed by EPA, they will be included with a supplemental response;
- Construction drawings and bluprints that do not illustrate physical changes over time or changes in operations at an Ash Grove facility;
- Detailed blueprints of buildings, equipment and structures
- Preliminary drawings, draft drawings;
- Bills of lading and capital expenditure reports;
- Records re purchases of materials including used oil;

- Customer sales records;
- Transportation/shipping agreements;
- Leases, deeds and easement documents of prior owners including UPRR easement on South Terminal property recorded 1984 which may be of public record;
- City of Portland temporary easements for construction of a combined sewer overflow pipeline project on the South Terminal property;
- Certificate of Water Right dated June 17, 1966, re Rivergate;
- Draft consultant reports and proposals for work;
- Unloader agreement described in Question 24, under which CGAC reserved the option of unloading alumina at the North Terminal for a specified term, but which has not been exercised;
- Waste disposal, treatment and recycling agreements and contracts not included in response to Question No. 40 for which representative agreements are included and disposal invoices;
- Site inspections for worker safety issues that do not include environmental concerns;
- Building inspection reports;
- Reports re compliance with Portland non-environmental laws;
- Manufacturing energy consumption survey;
- Duplicative documents showing Ash Grove's authority to operate in Oregon;
- Company tax returns before 2005;
- Insurance policies that will not respond to potential liability for environmental conditions at the Properties, *e.g.* workers compensation, crime, cargo and wharfingers' coverage;
- Risk management surveys of boiler equipment and fire safety issues;
- Source test results and air emissions calculations;
- Draft Stormwater Pollution Prevention Plans, Maintenance Plans and Spill Response Plans, correspondence with agencies re plan review and development;
- Company-wide internal annual production and environmental management reports;
- Quality control data for raw materials and finished products at Rivergate at Terminal;
- Monthly inspection reports of vegetation in Rivergate tank farm area;
- Operations and Maintenance manuals and plans;
- Sewerage bills for Rivergate plant;
- Records re volumes of sewage discharged to holding tank at South Terminal and disposal bills;
- Rail safety inspection reports;
- Documents regarding RCRA identification numbers;
- Personnel records;
- Insurance-related records.

4. DECLARATION

I declare under penalty of perjury that I am authorized to respond on behalf of Respondent and that the foregoing is complete, true, and correct.

Executed on October 24, 2008.

Signature

Eileen Flink
Type or Print Name

Vice President and General Counsel
Title

Mailing Address: Ash Grove Cement Company
P.O. Box 25900
Overland Park, KS 66225

APPENDIX 6

RIVERGATE – ENTITIES WITH CONTROL OVER ACTIVITIES ON-SITE

TERMINAL – ENTITIES WITH CONTROL OVER ACTIVITIES ON-SITE

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 10

RIVERGATE – DOCUMENTATION RELATED TO PRIOR OWNERS

TERMINAL – DOCUMENTATION RELATED TO PRIOR OWNERS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 12

RIVERGATE – DOCUMENTATION RELATED TO SUBMERGED AND SUBMERSIBLE LANDS LEASE

TERMINAL – DOCUMENTATION RELATED TO SUBMERGED AND SUBMERSIBLE LANDS LEASE

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 13A

RIVERGATE – PROPERTY BOUNDARIES, BUILDINGS AND STRUCTURES

TERMINAL – PROPERTY BOUNDARIES, BUILDINGS AND STRUCTURES

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 13B

RIVERGATE – UTILITIES AND PIPELINES

TERMINAL – UTILITIES AND PIPELINES

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 13H

RIVERGATE – DRAWING OF GROUNDWATER WELL

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 13I

RIVERGATE - DRAWING OF SANITARY SEWER SYSTEM

TERMINAL - DRAWINGS OF STORMWATER SYSTEM
CITY OF PORTLAND, BUREAU OF ENVIRONMENTAL SERVICES INSPECTION

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 13J

RIVERGATE – DRAWINGS OF ORIGINAL UNDERGROUND STORAGE TANKS
DRAWING OF CURRENT UNDERGROUND STORAGE TANK
UNDERGROUND STORAGE TANK NOTIFICATION
DRAWING OF GROUNDWATER MONITORING WELLS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 13L

RIVERGATE – MAPS AND DRAWINGS

TERMINAL – MAPS AND DRAWINGS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 13M

RIVERGATE – AERIAL PHOTOS

TERMINAL – AERIAL PHOTOS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 14

RIVERGATE – MAP OF RIVER-WARD BOUNDARY

TERMINAL – MAP OF RIVER-WARD BOUNDARY

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 15

RIVERGATE – DOCUMENTATION RELATED TO INVESTIGATIONS OF ENVIRONMENTAL MEDIA

TERMINAL – DOCUMENTATION RELATED TO INVESTIGATIONS OF ENVIRONMENTAL MEDIA
RELATED DOCUMENTATION INHERITED FROM PRIOR OWNERS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 16

RIVERGATE – MAPS OF SOLID WASTE MANAGEMENT UNITS OR MATERIAL STORAGE AREAS
DOCUMENTATION OF EARLY CORRESPONDENCE RELATED TO RIVER DISCHARGE

TERMINAL – MAPS OF SOLID WASTE MANAGEMENT UNITS OR MATERIAL STORAGE AREAS

Electronic copies of the documents that comprise Appendix 16 are included on the compact disc submitted in conjunction with this response.

APPENDIX 18

RIVERGATE – DRAWINGS OF AND DOCUMENTATION RELATED TO OUTFALL AND DRAINAGE DITCH

TERMINAL – DRAWINGS OF AND DOCUMENTATION RELATED TO OUTFALLS AND DRAINS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 19

RIVERGATE – STORMWATER OR PROPERTY DRAINAGE STUDIES AND SAMPLING
SPILL PLANS

TERMINAL – STORMWATER OR PROPERTY DRAINAGE STUDIES AND SAMPLING
STORMWATER POLLUTION CONTROL PLANS
SPILL PLANS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 21

RIVERGATE – MATERIAL QUANTITY DATA FROM ANNUAL REPORTS
PRODUCT SPECIFICATION SHEETS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 22

RIVERGATE – DOCUMENTATION RELATED TO CANCELLATION OF STATE WATERWAY LEASE

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 25

RIVERGATE – MSDS FOR PESTICIDES AND HERBICIDES USED ON-SITE

TERMINAL – MSDS FOR PESTICIDES AND HERBICIDES USED ON-SITE

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 27

RIVERGATE – RECORDS OF ARRANGEMENTS TO DISPOSE/TREAT WASTE WITHIN THE INVESTIGATION AREA

TERMINAL – RECORDS OF ARRANGEMENTS TO DISPOSE/TREAT WASTE WITHIN THE INVESTIGATION AREA

Electronic copies of the documents that comprise Appendix 27 are included on the compact disc submitted in conjunction with this response.

APPENDIX 29

RIVERGATE - PROCESS FLOW DIAGRAM

TERMINAL - PROCESS FLOW DIAGRAM

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 33

RIVERGATE – MSDS

TERMINAL – MSDS

Electronic copies of the documents that comprise Appendix 33 are included on the compact disc submitted in conjunction with this response.

APPENDIX 37

RIVERGATE – SCHEMATIC DIAGRAM OF WASTE GENERATION

TERMINAL – SCHEMATIC DIAGRAM OF WASTE GENERATION

Electronic copies of the documents that comprise Appendix 37 are included on the compact disc submitted in conjunction with this response.

APPENDIX 38

RIVERGATE – INDIVIDUALS WITH RESPONSIBILITY OVER ENVIRONMENTAL MATTERS

TERMINAL – INDIVIDUALS WITH RESPONSIBILITY OVER ENVIRONMENTAL MATTERS

Electronic copies of the documents that comprise Appendix 38 are included on the compact disc submitted in conjunction with this response.

APPENDIX 40

RIVERGATE – CONTRACTS AND DOCUMENTS REFLECTING WASTE ARRANGEMENTS AND DOCUMENTS INDICATING ULTIMATE DISPOSAL/RECYLING/TREATMENT LOCATIONS

TERMINAL - CONTRACTS AND DOCUMENTS REFLECTING WASTE ARRANGEMENTS AND DOCUMENTS INDICATING ULTIMATE DISPOSAL/RECYLING/TREATMENT LOCATIONS

Electronic copies of the documents that comprise Appendix 40 are included on the compact disc submitted in conjunction with this response.

APPENDIX 49

RIVERGATE – DOCUMENTATION IDENTIFYING THE LOCATION OF ACTIVITIES INVOLVING PCBS OR PCB-CONTAINING MATERIAL

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 50

REGULATORY AUTHORITIES FOR THE RIVERGATE AND TERMINAL FACILITIES

Electronic copies of the documents that comprise this Appendix are included on the compact disc

APPENDIX 51

RIVERGATE – DOCUMENTS ASSOCIATED WITH VIOLATIONS, CITATIONS, DEFICIENCIES

TERMINAL – DOCUMENTS ASSOCIATED WITH VIOLATIONS, CITATIONS, DEFICIENCIES

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 74B

CURRENT AND PAST OFFICERS AND DIRECTORS OF ASH GROVE

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 76

DOCUMENTATION RELATED TO ASH GROVE'S AUTHORITY TO DO BUSINESS IN OREGON

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 77E

DOCUMENTATION RELATED TO INSURANCE POLICIES

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 52

RIVERGATE – PERMIT APPLICATIONS
PERMITS ISSUED

TERMINAL – PERMIT APPLICATIONS
PERMITS ISSUED

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 53

RIVERGATE – HAZARDOUS WASTE ACTIVITY NOTIFICATIONS

TERMINAL – HAZARDOUS WASTE ACTIVITY NOTIFICATIONS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 58

RIVERGATE – REPORTS SUBMITTED TO AGENCIES

TERMINAL – REPORTS SUBMITTED TO AGENCIES

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 59

RIVERGATE – REGISTRATIONS, NOTIFICATIONS, INSPECTIONS, OR REPORTS REQUIRED TO BE MAINTAINED OR SUBMITTED TO ANY GOVERNMENT AGENCY

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 62

RIVERGATE – DOCUMENTATION OF LEAKS, SPILLS, OR RELEASES OF WASTE INCLUDING PETROLEUM, HAZARDOUS SUBSTANCES, POLLUTANTS, OR CONTAMINANTS

TERMINAL – DOCUMENTATION OF LEAKS, SPILLS, OR RELEASES OF WASTE INCLUDING PETROLEUM, HAZARDOUS SUBSTANCES, POLLUTANTS, OR CONTAMINANTS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 64

RIVERGATE – DOCUMENTATION OF THE EXCAVATION OR REMOVAL OF CONTAMINATED SOIL

TERMINAL – DOCUMENTATION OF THE EXCAVATION OR REMOVAL OF CONTAMINATED SOIL

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 65

RIVERGATE – DOCUMENTATION RELATED TO GROUNDWATER TESTING

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 66

RIVERGATE – DOCUMENTS RELATED TO GROUNDWATER RESPONSE ACTIONS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 67

RIVERGATE – DOCUMENTATION RELATED TO SPILLS, LEAKS, OR DISCHARGES INTO THE WILLAMETTE RIVER

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 71

RIVERGATE – DOCUMENTATION RELATED TO INVESTIGATIONS OF ENVIRONMENTAL MEDIA

TERMINAL – DOCUMENTATION RELATED TO INVESTIGATIONS OF ENVIRONMENTAL MEDIA
RELATED DOCUMENTATION INHERITED FROM PRIOR OWNERS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

APPENDIX 72

RIVERGATE – DOCUMENTATION OF REMEDIATION AND RESPONSE ACTIONS

TERMINAL – DOCUMENTATION OF REMEDIATION AND RESPONSE ACTIONS

Electronic copies of the documents that comprise this Appendix are included on the compact disc submitted in conjunction with this response.

DECLARATION

I declare under penalty of perjury that I am authorized to respond on behalf of Respondent and that the foregoing is complete, true, and correct.

Executed on October 24, 2008.

Eileen Flink
Signature

Eileen Flink
Type or Print Name

Vice President and General Counsel
Title

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